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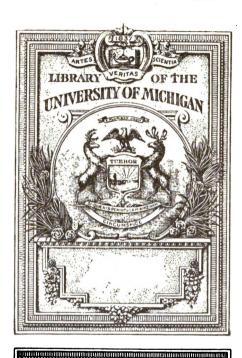
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NATURAL HISTORY.

THE ELEPHANT

AS HE EXISTS

IN A WILD STATE, AND AS HE HAS BEEN MADE SUBSERVIENT, IN PRACE AND IN WAR, TO THE PURPOSES OF MAN.

NEW-YORK:

HARPER & BROTHERS, 82 CLIFF-STREET.

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PUBLISHERS' ADVERTISEMENT.

THE elephant, whether considered in relation to his natural or domestic condition, is undoubtedly the most remarkable of quadrupeds. If, by reason of his vast size and strength and his surprising sagacity, he is to be regarded, in his state of native wildness, as at once the mightiest and the wisest of the brute creation, his history is still more calculated to excite our curiosity and wonder, in as far as, notwithstanding all his formidable qualities, he has been made subservient to the uses of man. We are at a loss, indeed, in this latter view, whether we should most admire the astonishing docility and acuteness of the half-reasoning brute, or the all-mastering power of human ingenuity and skill.

The following pages contain a very full and particular account of this interesting animal, both in his wild and domestic state; and they so abound in entertaining and instructive matter, that they may be read with equal advantage and delight by persons of every age and of every degree of intellectual advancement. So connected, indeed, is

the history of the elephant with the social institutions, the customs, and the most striking events of the East, that, in studying it, we cannot fail of becoming incidentally acquainted with many collateral facts of no little importance and interest; and of which the reader will be satisfied in going over this amusing volume.

This work was originally published by the British Society for the Diffusion of Useful Knowledge; it has been carefully revised, and some of its least interesting portions have been omitted in the present edition. It is presented to the public in entire confidence that it will be found in all respects worthy of perusal.

H. & B.

New-York, Sept., 1839.

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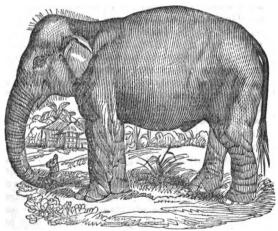
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THE ELEPHANT

CHAPTER I.

ELEPHANTS OF THE MENAGERIES.



The Indian Elephant. - Elephas Indiaus, CUVIER.

In the year 1681 an elephant was accidentally destroyed by fire, in a booth, in the city of Dublin; and when the fire was extinguished, every one endeavoured to procure some part of the elephant,

few of them having seen him living, by reason of the great rates put upon the sight of him. We mention this circumstance to contrast it with the familiar acquaintance which almost every child of the present day has with this quadruped.

A century and a half ago, the elephant was rarely brought to Great Britain, and, for this reason, the multitude had not only extravagant ideas of the intelligence of this most interesting animal, but believed a great many absurdities regarding it which opportunities of observation would have speedily eradicated. Thus, when Sir Thomas Brown wrote his "Inquiries into vulgar and common Errors," he states it to have been the prevalent opinion up to his time (about 1670), that the elephant had no joints, and that it never lay down. In a very curious specimen of our early natural history, "The Dialogues of Creatures Moralyzed," mention is made of "the olefawnte that boweth not the knees." In an old play printed in 1633, a woman is described as "stubborn as an elephant's leg-no bending in her;" and Shakspeare makes Ulysses, in Troilus and Cressida, say, " the elephant hath joints, but none for courtesy: his legs are legs for necessity. not for flexure." These passages show the extent of the popular notion; to refute which Sir T. Brown appeals to experience, "whereof not many years past we have had the advantage in England, by an elephant shown in many parts thereof, not only in the posture of standing, but kneeling and lying down."* This exhibition appears to have produced the beneficial effects of all direct appeals to the senses, with respect to errors which are capable of

* Book iii., chap. i.

being refuted by such a test; for it seems that the false opinions regarding the elephant were "well suppressed," by the demonstration that he had no difficulty in assuming those positions which, on account of his bulk, were affirmed to be impossible.

Sir Thomas Brown, however, dreads the revival of the error in the next generation "from some strings of tradition;" for he argues, that as this was not the first elephant that had been seen in Eng. land, the effect of the truth might wear away, as it had before yielded to vulgar prejudice. It is quite clear, both from the general tone in which this writer mentions the subject, and from the particular facts upon record, that elephants were scarcely known in Europe as recently as the middle of the seventeenth century. Lewis IX. of France, indeed, sent an elephant to Henry III., which was probably procured from some of the African chiefs at the period when the French king invaded Palestine by the way of Egypt. This elephant was kept in the Tower of London; and with somewhat more of comfort to himself, as to the space in which he was confined, than the pent-up animals of our modern menageries: for the king, in a precept to the sheriff of London in 1256, says, "we command you, that, of the farm of our city, ye cause, without delay, to be built at our Tower of London, one house of forty feet long and twenty feet deep, for our elephant."* Emanuel of Portugal also sent a remarkable elephant to Pope Leo X., which was exhibited at Rome; and Cardan, about the same period (the beginning of the sixteenth century), describes an elephant which he had seen at the court



^{*} Maitland's London, vol. i. p. 171.—Edit. 1772.

of the Queen of Bohemia, the daughter of the Emperor Charles V.* With the additional exception of an elephant which was sent to Charlemagne in the year 802, by Haroun al Raschid, calif of the Saracens, there is no account of the animal being brought to Europe after the time when the early Byzantine monarchs, in imitation of the princes who reigned before the division of the Roman empire, exhibited him to the people in the cruel sports of the circus. Even in the time of Justinian (A.D. 527), the elephant was rarely shown either at Rome or Constantinople.

During the middle ages, little or nothing was known of the elephant except through the inaccurate representations of the animal upon medals. The figure of the elephant was used, too, in heraldry, with a tower on his back. When the arts were little practised in England, the representation was rude enough; as may be seen on an ancient plate in St. Mary's Hall at Coventry: and probably, from this inaccuracy of form, the multitude, with the common disposition to burlesque, convert. ed the "Elephant and Castle" into "the Pig and Whistle." Up to the time of the revival of letters. and, indeed, till the end of the sixteenth century, the people of Italy, whose ancestors had been so familiar with this quadruped, accounted all that was said about his sagacity as a fable, and had no idea of his form except as to its vastness. But the growing intercourse of the moderns with distant countries, and the spirit of curiosity which more particularly belongs to commercial nations, gradually rendered the elephant a somewhat common object

* Physics Curiosis, p. 1024.

in most large collections of foreign animals—at least after the Portuguese had penetrated to the interior of Africa, and the discovery of the passage to India had gradually led to the establishment of European settlements in the East. In this way the French king had an elephant at Versailles, which came from Congo, and which died in 1681. Thamas Kouli Khan, in 1741, sent fourteen as a present to the Czar of Russia; and they have become so easy of attainment in England, that we may readily believe an anecdote told regarding the elephant which lately died at Chiswick: that the Duke of Devonshire, having been asked by a lady of rank what she should send him from India. and having laughingly answered, "Oh, nothing smaller than an elephant," was surprised to find, at the expiration of some months, a very handsome female of the species consigned to his care.

The Duke of Devonshire's elephant was kept at his villa at Chiswick, under circumstances peculiarly favourable to its health and docility. house in which she was shut up was of large dimensions, well ventilated, and arranged in every particular with a proper regard to the comfort of the animal. But she often had the range of a spacious paddock; and the exhibition of her sagacity was therefore doubly pleasing, for it was evidently not effected by rigid confinement. At the voice of her keeper she came out of her house, and immediately took up a broom, ready to perform his bidding in sweeping the paths or the grass. She would follow him round the enclosure with a pail or a watering-pot, showing her readiness to take that share of labour which the elephants of the East are

so willing to perform. Her reward was a carrot and some water; but, previously to satisfying her thirst by an ample draught, she would exhibit her ingenuity in emptying the contents of a soda-water bottle, which was tightly corked. This she effected in a singularly adroit manner. Pressing the small bottle against the ground with her enormous foot, so as to hold it securely at an angle of about forty-five degrees, she gradually twisted out the cork with her trunk, although it was very little above the edge of the neck; then, without altering the position, she turned the trunk round the bottle, so that she might reverse it, and thus empty the water into the extremity of the proboscis. she accomplished without spilling a drop; and she delivered the empty bottle to her keeper before she attempted to discharge the contents of the trunk into the mouth. She performed another trick which required equal nicety and patience. The keeper, who was accustomed to ride on her neck like the mohouts, or elephant drivers of India, had a large cloth or housing which he spread over her when he thus bestrode her in somewhat of Oriental state. Upon alighting, which she allowed him to do by kneeling, he desired her to take off the cloth. This she effected by putting the muscles of her loins in action, so that the shrinking of her loose skin gave motion to the cloth, and it gradually wriggled on one side, till it fell by its own weight. The cloth was then, of course, in a heap; but the elephant, spreading it carefully upon the grass with her trunk, folded it up as a napkin is folded, till it was sufficiently compact for the purpose. She then poised it with her trunk for a few seconds, and by one

ierk threw it over her head to the centre of her back, where it remained as steady as if the burden had been adjusted by human hands. The affection of this poor animal for her keeper was very great. The man who had the charge of her in 1828, when we saw her, had attended her for five years, having succeeded another who had been with her eight or ten years. When first placed under his charge, she was intractable for some time, evidently resenting the loss of her former friend; but she gradually became obedient and attached, and would cry after him whenever he was absent for more than a few The elephants of India, in the same wav. cannot easily be brought to obey a stranger, and manifest a remarkable knowledge of their old mohouts if they should meet after a long separation.* The elephant of the Duke of Devonshire was about twenty-one years old when she died, early in 1829. We have understood that the disease which carried her off was pulmonary consumption.

The inhabitants of London have recently witnessed the dramatic exhibition of an elephant, which has afforded them a more remarkable example of the sagacity of this quadruped than the ordinary docility which it manifests at the command of the showman. The elephant which attracted crowds to the Adelphi Theatre was probably not more sagacious than the greater number of her species; but she was well disciplined, and she exhibited her feats with considerable effect, by their adaptation to scenic display. To march in a procession, to kneel down without any more perceptible bidding than the waving of a hand, to salute a particular

^{*} See Williamson's Oriental Field Sports, p. 41.

individual, to place a crown on the head of the "true prince," to eat and drink with great gravity and propriety of demeanour, and to make her reverence to an audience without any apparent signal, are striking evidences of the tractability of the creature; but they are by no means of the class of novel exhibitions, and they have been excelled by other performances, of which we have a distinct record. One of the most remarkable parratives of the an. cient display of elephants in a theatre is that of Ælian, who has described, in a very lively manner, the extreme docility of the elephants of Germanicus. At that period elephants were bred at Rome; a fact which has been most unaccountably overlooked in the descriptions of modern naturalists, but the practicability of which has received abundant confirmation from recent experience. Great care, according to Ælian, was paid to their health; and the nicest discipline was used to extinguish whatever was ferocious in their nature, and to call forth their sagacity by undeviating kindness. Particular attention was directed to the effect of music upon them: and they were so accustomed to musical instruments, that they not only lost all dread of the clashing of cimbals, but learned to feel delight at the gentle notes of flutes, and would beat time with their feet when their ears were gratified with the agreea. ble sounds to which they were habituated. keeper accustomed them also to the sight of great multitudes of people. Upon an occasion when a particular exhibition of the docility of the elephants was required, twelve of the most sagacious and well-trained were selected, who, marching into the theatre with a regular step, at the voice of their

keeper moved in harmonious circle, and sometimes divided into parties, scattering flowers over the pavement. In the intervals of the dance they would beat time to the music, still preserving their proper order. The Romans, with their accustomed luxury, feasted the elephants after this display with prodigal munificence. Splendid couches were placed in the arena, ornamented with paintings and covered with tapestry. Before the couches, upon tables of ivory and cedar, was spread the banquet of the elephants, in vessels of gold and sil-The preparations being completed, the twelve elephants marched in, six clad in the robes of men. and six females attired as women. They lay down in order upon their couches, and, at a signal, extended their trunks and ate with most praiseworthy moderation. Not one of them, says Ælian, appeared the least voracious, or manifested any disposition for an unequal share of the food or an undue proportion of the delicacies. They were as moderate, also, in their drink, and received the cups which were presented to them with the greatest decorum. According to Pliny, at the spectacles given by Germanicus it was not an uncommon thing to see elephants hurl javelins in the air and catch them in their trunks, fight with each other as gladiators, and then execute a Pyrrhic dance. Lastly, they danced upon a rope, and their steps were so practised and certain, that four of them traversed the rope, bearing a litter which contained one of their companions, who feigned to be sick.* This

^{*} It is difficult to understand how the elephants could carry a litter without walking along two parallel ropes. The text of Pliny gives no elucidation of this point.

feat of dancing or walking upon a rope might, perhaps, be doubted, if it rested merely upon the testimony of a single author; but the practice is confirmed by many ancient writers of authority, who agree with Pliny, that the elephants trained at Rome would not only walk along a rope forward, but retire backward with equal precision. scribes an elephant who, at the command of his African keeper, would kneel down and walk upon a rope. Suetonius also mentions, that an elephant, in the presence of the Emperor Galba, climbed up an inclined rope to the roof of the theatre, and descended in the same way, bearing a sitter. Dion gives a similar testimony to the extraordinary power of so heavy an animal to walk along a rope without any balance; a docility which is the more wonderful when we bear in mind that one of the strong. est instincts which the elephant possesses is that which impels him to experiment upon the stability of every surface which he is required to cross before he will trust his body to the chance of breaking down the support which is prepared for him. yielding rope must have called this instinct into action; although, it should be observed, that the elephant will pass a bridge which vibrates, when nothing will induce him to set foot upon one whose tottering condition manifests its insecurity.* may a little abate our surprise at the rope-dancing faculty of the elephant, when we learn that a horse has exhibited the same performance. At the solemnities which attended the wedding of Robert, brother to the king of France, in 1237, a horse was ridden along a rope. †

^{*} Williamson's Field Sports.

[†] Leibnitz Accessiones Historics, quoted in Beckmann, vol. iii.

Among the curious feats of elephants, though less remarkable than those we have described. Arrian mentions that he saw an elephant who, having a cymbal attached to each knee, and holding a third by his proboscis, beat a measure with astonishing exactness; and that other elephants danced in a circle round him, without deviating in the least from the time which their companion indicated. Busbequius (or Busbec), who was ambassador from the Emperor of Germany to Constantinople in 1555, saw an elephant there not only dance with elegance and accuracy, but play with a ball with great skill, throwing it with its trunk, and catching it again as easily as a man could with his hands. Of the reverence which elephants may be taught to pay to human beings, we have several remarka. ble instances. An elephant is recorded to have saluted Domitian: and Martial has alluded to the circumstance in a nauseously flattering epigram, which intimates that the creature paid this homage without any command; and that he instinctively felt the divinity, as the poet calls it, of this pampered tyrant. The elephant which Emanuel of Portugal presented to Leo X. went upon his knees, with a profound inclination of his head, when he first saw the pope. The veneration of the elephant for persons in authority has descended to those of secondary dignity; for Cardan saw the one belonging to the Queen of Bohemia, which was also very sagacious in other respects, welcome an archbishop of Milan upon his bended knees. homage as this, however agreeable it may be to human pride, is as worthless as that which Augus. tus received upon his triumphal entry into Rome.

after the battle of Actium, when the parrots from the windows cried out, "Honour and victory to Cæsar." The conqueror gave enormous prices for these sagacious birds; but one bird, unluckily forgetting his last lesson, repeated that which he had been taught when the success of Augustus over his great rival was not so sure, "Honour and victory to Antony the Emperor;" and then Augustus grew tired of his winged flatterers, as he called them, perhaps without making the discovery that all flatterers are equally contemptible.

The exhibition of the elephant at the Adelphi Theatre, however it may have been exceeded by the feats of the elephants of antiquity, was exceedingly curious and instructive. The animal took part in the scene with almost undeviating precision; displayed no want of confidence or self-possession in the midst of lights, and music, and the shouts of the people; and made her parting salute with as much grace as if she had emperors and popes only to bow to. One of the most curious scenes in which she took a prominent part was that in which she assisted the escape of the prince and his adherents from prison, by kneeling upon her hind legs, and thus forming an inclined plane upon which her friends might safely reach the ground.

It has been stated that this elephant, when first brought out upon the stage of the Adelphi, would not be led to any particular point till she had carefully tried the strength of the boards upon which she trod, thrusting her trunk upon every suspicious spot, and slowly and hesitatingly placing her feet in advance before she moved her body forward. A

remarkable example of this instinct is mentioned by a writer who had opportunities of observing the elephants of India: "An elephant belonging to Mr. Boddam, of the Bengal civil service at Gyah, used every day to pass over a small bridge, leading from his master's house into the town of Gvah. He one day refused to go over it, and it was with great difficulty, by boring him most cruelly with the hawkuss (an iron instrument), that the mohout (driver) could get him to venture on the bridge, the strength of which he first tried with his trunk. showing clearly that he suspected that it was not sufficiently strong. At last he went on, and before he could get over the bridge gave way, and they were precipitated into the ditch, which killed the driver and considerably injured the elephant."*

This instinct which the elephant possesses of trying the strength of any construction, whether natural or artificial, which it is necessary for him to cross, is particularly worthy of observation. When the enormous weight of a full-grown elephant is considered, it must be obvious that, if the creature were rashly to place his body upon any frail support, his danger would be extreme. His caution. therefore, in avoiding such an evil, is constantly exercised; and the powerful as well as delicate instrument of touch which he possesses enables him always to be convinced of his security, without incurring any risk under ordinary circumstances. The elephant at the Adelphi retained this instinct in full force, however she might have been led away from her natural habits by the artificial restraints of her discipline; and we therefore give full be-

^{*} Johnson's Indian Field Sports, p. 56.

lief to the assertion. We are not quite so prepared to believe what we have also heard stated with regard to this animal, that, upon being satisfied of the strength of the stage, and finding herself in a theatre, she immediately, without any direction from her keeper, began to rehearse the scenes which she had previously performed at Paris. Pliny, however, tells us, that an elephant, having been punished for his inaptitude in executing some feat which he was required to learn, was observed at night endeavouring to practise what he had vainly attempted in the day; and Plutarch confirms this, by mentioning an elephant who practised his theatrical attitudes alone by moonlight.

A very curious example of the teachableness of the elephant is presented in the instance of a female. about seven years old, in Mr. Cross's Menagerie. This animal was accustomed to perform some of the tricks usually taught to her species, such as kneeling down at the command of her keeper, ring. ing a bell, and blowing through her proboscis, as a mark of pleasure. The success of the elephant at the Adelphi Theatre was the cause of her being incited to higher performances. A proposal was made to Mr. Cross that she should be exhibited in a melodrama at the Coburg Theatre; and she was accordingly removed thither to be trained in her new vocation. She followed her keeper very readily through the streets; but she became uneasy at her change of lodgings, and the man, to quiet her, was obliged to sleep in the stable in which she was placed. Her theatrical education occupied only three weeks; and in that short period she became accustomed to glaring lights and sudden

sounds; learned to move with a measured pace to musical cadences; was taught to distinguish one actor from another, so as to place a crown, with true poetic justice, on the head of the lawful king, and feasted at her banquet with almost as much propriety as the elephants of Germanicus. It is satisfactory to know, that this rapid instruction was not accompanied with severity. The keeper of the docile animal pursued a system of unremitting kindness; and every new acquirement was impressed upon her by judicious rewards. This was the plan which was followed by the ancients in the education of their elephants. Those whose performances are described by Ælian were, according to this writer, brought under discipline by the greatest kindness, and by the indulgence of varieties of food which were grateful to their palates; and thus, he says, whatever was ferocious in their nature was gradually expelled, and a perfect gentleness, and even a sort of humanity, was induced in them. Ælian argues from this, that the beast is of a generous and noble disposition. The same principle. we apprehend, may be applied to the education of nearly all quadrupeds. The horse is made vicious by a harsh driver, and the ass acquires his hereditary doggedness from constant ill-treatment. The elephant is certainly more easily trained than the horse or the ass; but the application of severity to the less teachable animal is only an indication of the ill-temper and impatience of the trainer.

The elephant of the Coburg Theatre is remarkable for a constant practice of rolling her body, as if she were swayed by the motion of a ship; and it is stated that she acquired this habit upon her

voyage from Calcutta. The keeper informed us. that while she was occupied by her instruction at the theatre, he scarcely ever observed this; but that she resumed the motion immediately after she was placed in her own cell. Almost every elephant. under confinement, has a peculiar movement, as if it were necessary to substitute some exercise for the unrestrained activity of a state of nature. Darwin considers that this species of restlessness, in animals generally, is occasioned by increase of stimulus, or by accumulation of sensorial power. "Thus," he says, "when a squirrel is confined in a cage, he feels uneasiness from the accumulation of sensorial power in his muscles, which were before in continual violent exertion in his habits of life: and in this situation finds relief by perpetual. ly iumping about his cage to expend a part of this accumulated sensorial power. For the same rea. son, those children who are constrained to sit in some schools for hours together, are liable to acquire habits of moving some muscles of their faces. or hands, or feet, which are called tricks, to exhaust a part of the accumulated sensorial power."* elephant also finds it essential to employ some portion of that intelligence, which, in his condition of liberty, conduces to his support and his pleasure. in an ever-active curiosity about little matters. accommodates himself as well as he can to the narrow sphere of action in which he is placed. Thus, an elephant in a cell is always feeling about with his trunk; inserts the finger, as it has been expressively called, into the minutest crack; and examines every new object which is presented to

^{*} Zoonomia, vol. iv., p. 12, 8vo.

him with the most eager curiosity. In this way we have observed an elephant spend more than an hour in unscrewing a nut which had been newly placed on the upper part of the cage; and M. Houel, a French artist, who published an elaborate account of the two elephants which the victorious armies of the French republic brought to Paris from Holland, states that, having, during the daily walks of the elephants, drawn some perpendicular and horizontal lines upon the wall of their cell, he was astonished to observe them, upon their return, examine these marks with the greatest attention, while the female at length deliberately proceeded to rub them out with her trunk. M. Houel thinks that the necessity for some occupation is most felt by the female.

The elephant is, to a surprising extent, the creature of habit. We have mentioned that Mr. Cross's elephant required her keeper to sleep in the stable where she was newly placed. Upon her return to her old cell, the keeper left her at night as he had been previously accustomed to do; but the animal would not go to rest as she usually did. She perse vered in remaining upon her legs for four or five nights, till the keeper conjectured that she was unhappy without him. A hammock was therefore slung in the cell for the keeper; and the poor beast, immediately that he took his place near her, lay down with evident satisfaction.

Elephants are not only annoyed by any deviation from their accustomed habits, but they sometimes resent any constrained departure from the regularity of their course, in an odd way. It is stated, among the traditionary stories of elephant sagacity, that Pidcock, to whom the Exeter Change Menagerie formerly belonged, had for some years a custom of treating himself and his elephant in the evening with a glass of spirits, for which the animal regularly looked. Pidcock invariably gave the elephant the first glass out of the bottle, till one night he exclaimed. "You have been served first long enough, and it's my turn now." The proud beast was offended; refused the glass when he was denied his precedence; and never more would join his master in his revelries. An affecting instance of the force of habitual obedience was presented by Chuni, the famous elephant who was shot at Exeter Change. In the greatest access of his fury, when bullets were striking him from every side, he obeyed the voice of his keeper, who ordered him to kneel, in the belief that he might be more easily shot in that position. In the same way, an elephant who became furious at Geneva, in 1820, under circumstances similar to those which led to the death of Chuni, when running wildly about the town, attacking every one who came in his way, yielded the most prompt obedience to the female whose property he was, and suffered himself to be led by her to a place of safety, where he was killed.

The practice of giving names to elephants is of great antiquity, and is almost universal in the East. Thus, the favourite elephant of Porus was called Nicon, and that of Antiochus, Ajax; Abulabaz was the name of that which Haroun al Raschid sent to Charlemagne, and Hanno of that which Emanuel of Portugal presented to Leo X. It was said of the Mogul emperor, Akbar, that he knew all the names of his many thousand elephants.

Whatever interest we may feel in the sagacity which is ordinarily displayed by the elephants of our common menageries, the wretched state of confinement in which so large an animal is kept prevents us forming any adequate notions of many of

its peculiarities.

The elephants of the Jardin des Plantes, at Paris, have, by comparison with the elephants of our close menageries, a life of much happiness. Their cells are spacious; they are let out, at particular periods, to range about a large enclosure; and they have a bath which they enjoy with infinite delight in warm weather. We saw, in 1825, the large male (who is since dead) up to his middle in a pool, in



Elephant of the Jardin des Plantes.

a hot day in August, spouting the water from his trunk with scarcely less joy than he would feel in his native woods. When his bath was finished, he would stand quietly for a little time in the sun; and then, gathering a quantity of dust in his trunk, blow it over his back till the crevices in his skin were sufficiently covered to be protected against the flies.

The close confinement of the elephant has doubtless a tendency to aggravate those periodical fits of rage to which the males are subject; and, moreover, these fits are much more fearful when the animal is pent up in a narrow cage. The pieces of oak which formed the bars of Chuni's cage were eight or ten inches square, and yet he snapped them like matches. The elephants of India which are employed in domestic purposes, although subject to these fits, are rarely obliged to be destroyed. They are confined in a secure place till the effect is passed off. Again, elephants in the miserable cages of our menageries are liable not only to accidents, but to diseases which prevent them reach. ing the great age which is peculiar to this quadru-The elephant of Louis XIV., which died at Versailles when he was seventeen years old, for the last five years of his life was obliged to be lifted up by a machine when he lay down, which he rarely did. This was evidently an effect of confinement, which had so weakened the muscular power of his body as to give some probability to the old fable, that the elephant, in a state of nature, always sleeps in a standing position against a tree. Another elephant, which was kept at Versailles in the time of Louis XV., was so impatient of confinement that

he one night broke his chains, tore down the door of his cage, and rushed to a muddy pond in the park, where he was suffocated. The elephants which were taken by the French from Holland had been accustomed, when quite young, to wander unrestrained in the park of the Petit Loo, browsing on the trees, and assisting each other to reach the When they were placed in cages for removal, being separated, the male soon shivered his prison to pieces, and their departure was delayed for some weeks. Their travelling cages being at length made strong enough, they were indeed moved without serious injury; but the female broke one of her tusks in terror when she first saw the daylight, after a long continuance in a state of dark-Upon the arrival of these elephants at Paris they were confined for some time in the usual absurd manner; but at length a proper enclosure was attached to their cages, and they were often permitted even a wider range, so that they could be viewed under circumstances something approaching to a state of nature. M. Houel says, "I have occasionally seen the two elephants led into the garden of the Museum of Natural History on fine days when the temperature was mild. The sight of the sun appeared to be to these creatures a source of the liveliest joy. The presence of this luminary refreshed them, as it refreshes everything in nature; and their happiness was not concentrated in their thoughts, but manifested itself in every form of They bounded round each other in a race of astonishing swiftness; they leaped from side to side, forward, backward; they galloped, they trotted. All their movements were characterized by a sort of mad delight; the expression of their love for liberty, which is innate in every being, and which the habit of slavery could not stifle."*

The quantity of food required for the daily consumption of a full-grown elephant is enormous. The elephant of Louis XIV. had daily eighty pounds of bread, twelve pints of wine, and a large quantity of vegetable soup, with bread and rice; this was exclusive of grass, and what he got from visiters. Desmarest states, that the domesticated elephant requires daily about two hundred pounds of aliment of all sorts. It is recorded by one of the Roman historians, that the elephants which were taken from the Carthaginians by Metellus were so ex. pensive to keep, that they were put to death in the The elephant, if not well fed and with regularity, soon becomes a miserable object. op Heber witnessed the wretched condition of an old elephant that had been cheated of his proper "Adjoining the pool we saw a crowd allowance. of people assembled round a fallen elephant; apprehending that it was one of our own, I urged my horse to the spot. On asking, however, whose it was, a by-stander said it belonged to 'the asylum of the world,' and had fallen down from weakness. which was not surprising, since, instead of an allowance of twenty-five rupees a month, necessary for the keep of an elephant, I was told that these poor creatures, all but those in the immediate stables of his majesty, had, for some time back, owing to the dilapidated state of the finances and the roguery of the commissariat, received only five. now given the wretched animal a cordial, and were

^{*} Histoire, &c., p. 56.

endeavouring to raise it on its legs, but in vain. It groaned pitifully, but lay quite helpless, and was, in fact, a mountain of skin and bone."* This hap-



Elephant lying down.

pened in the Nawab Vizier's country, where elephants, not many years ago, were maintained in great numbers, from those resources which only Asiatic despotism could command. The cost of a stud of elephants, such as the Mogul princes kept up, must have been enormous. To each of the hundred and one elephants that were set apart for the Emperor Akbar's own riding, the daily allowance of food was two hundred pounds in weight. Most of them, in addition, had ten pounds of sugar, besides rice, pepper, and milk. In the sugarcane season, each elephant had daily three hundred canes. The elephants of the British menageries are principally fed upon hay and carrots.

* Journal, vol. ii., p. 46.

CHAPTER II.

THE STRUCTURE OF THE ELEPHANT, EXHIBITED IN COMMEXION WITH ITS NATURAL HABITS.

It has been well observed by a French naturalist, in speaking of the actions of animals, that those things which they learn through their intercourse with man are liable to change, and, in reality, do change, whenever there is any relaxation of the care with which the animals are taught: but that, on the contrary, those habits which depend only upon the laws of nature, and which are acquired without education by the force of instinct, are as invariable as nature herself. The elephants of the menageries, as we have described them in the previous chapter, may perform less astonishing tricks than the elephants of the Romans; and the elephants that carry the baggage and lift the guns of the English armies in India, may be less tractable in war than those of Kublai Khan. Elephants were not intended by Nature to dance upon ropes, or to carry towers full of armed warriors upon their backs. If the men of other times, subduing this mighty beast to their use, taught him to turn aside from his natural habits to apply his sagacity and his strength to such purposes, and if the men of the present day have ceased thus to employ him, we must not conclude that his strength or his intelligence are therefore diminished. What he did in a state of nature two

thousand years ago, he does now. His natural habits, as well as those of every other living thing, are derived from his organization; his structure is the best adapted to the necessities of his existence; and as the structure is invariably the same in the same species, we may conclude that the natural

habits are equally invariable.

It is this consideration that will at once show us the absurdity of imagining that the natural habits of animals are changed by accident or time. fon says, "the elephant, like the beaver, loves the society of its species. Elephants understand each other, assemble, disperse, and act in concert. they do not build and do not labour in common, the reason may be ascribed to the want of space and tranquillity; for men were in old times greatly multiplied where the elephant most abounded." reason which Buffon gives for the interruption of the labours of the elephant by man is certainly incorrect; for this quadruped lives, and has always lived. in particular districts, without the interference of the But with or without man he would human race. have remained the same as he is now. He does not build, because he is not organized for building; the beaver is an architect, because the faculty of building is necessary for his comfortable existence, and the art is suggested by his organization. But the beaver, like the sparrow and the wasp, builds in one way, and has always so built. Instinct undergoes no change from experience; therefore birds and insects now build as they built in the time of Aristotle.

The comparison of habits with structure has given to Natural History in our own times a truth and precision which it lamentably wanted half a cen-

tury ago. Natural History was, for many ages, little more than a crude mass of isolated statements. a great number of which were false and contradic-Alexander the Great, who, amid his extravagant plans of conquest, had an ardent desire for the advancement of knowledge, commanded all the huntsmen, fowlers, and fishermen of Asia and Greece, to render an account of their discoveries to Aristotle. From this cause, probably, the Natural History of that extraordinary philosopher is in many particulars more correct than that of the eloquent Buffon, who was always straining his facts to support a theory. But still the truths of the elder naturalist are mixed with a vast quantity of fable; a necessary result of their own limited opportunities of observation, and their reliance upon information which too often proceeded from ignorant and care-The huntsmen, and fowlers, and less narrators. fishermen of antiquity, who communicated facts to Aristotle and other interpreters of nature, were succeeded by the travellers of modern times: and these, like their predecessors, went on for several generations, repeating the old fables which found a place in every system of Natural History, and rarely attempting to examine the habits of animals with their own eyes. Indeed, the difficulty of eradicating a false statement in Natural History is quite remarkable, and ought to operate as a striking example of the mischief of repeating assertions which are unsupported by distinct evidence. Thus the greater number of writers, scientific as well as popular, assert that the young elephant sucks the mother with its trunk; arguing from the difficulty which the little creature would have in using its mouth.

and passing over the precise statements of those who have actually witnessed the operation, performed in the very way which these parties describe as impossible. Again, many persons, even in our day, maintain that the elephant will not breed in captivity; although Mr. Corse, formerly superintendent of the East India Company's elephants at Tiperah, a province of Bengal, has disproved this notion from his own experience; and has thus given the fullest confirmation of the statements of Ælian and other ancient writers, that they were bred at Rome. A great deal of the popular history of the elephant, in particular, has, through such a perseverance in error, become matter of romance. have, for this reason, assigned especial importance to the collection of the facts of his natural condition. and of his employment by mankind; and we are quite sure, whatever may be the imperfections of our narrative, it will lose none of its interest by. having all its statements supported by adequate authority.

The living species of elephants are two, the Indian and the African. We shall subsequently speak of their specific distinctions, which consist in the shape of the head, the size of the ears, and the formation of the teeth. The Indian elephant is found in all the southern countries of Asia: that is, in Cochin China; in the kingdoms of Siam, Pegu, and Ava; in Hindostan, and the adjacent islands, particularly in Ceylon. The African elephant inhabits all the countries of the western side of Africa, from the Niger and the Senegal to the Cape of Good Hope. Both species live in large herds, reigning the almost exclusive possessors of immense forests and

marshy plains covered with long grass; repelling the attacks of every other quadruped by their great strength, their swiftness, and their union; and diminished in their numbers or forced into captivity by one vanquisher only, man, who has subdued their force and intelligence to his domestic uses, and for many ages has found an article of luxury in the solid substance which forms their principle defence in their native woods.

When we consider the slowness with which elephants are produced on the one hand, and the enormous quantity of food which they require for their support on the other, the immense numbers which still range over the uncultivated portions of India and Africa offer one of the many wonderful examples of the care with which the maintenance of every living thing is provided for. Destroying as much vegetable food as he consumes by the broad feet which sustain his prodigious weight, and unfitted to endure any long privations, as the camel does, the elephant is the natural inhabitant of those regions where there is a wild luxuriousness of vegetation, but where man has not yet settled to make the earth bear even more abundantly what is peculiarly adapted to his own sustenance. The elephant and man cannot be inhabitants of the same region at one and the same time, without a limit being placed to the multiplication of the mightier, but the less sagacious animal: and thus the crafty Indian entraps him into captivity, and the wily Caffre marks him down with his gun, destroying some hundreds in the course of a life devoted to the dangerous task of hunting him for his ivory. Civilization, partial as it is in Africa, is driving the elephants farther

and farther from the haunts of men; but they still are seen by travellers in very large numbers. his journey from Mourzuk to Kouka, in Bornou. Major Denham came upon elephants' footmarks of an immense size, and only a few hours old. "Whole trees were broken down where they had fed; and where they had reposed their ponderous bodies, young trees, shrubs, and underwood had been crushed beneath their weight."* Four days after, he saw the herd in grounds annually overflowed by the waters of a lake, where the coarse grass is twice the height of a man. "They seemed to cover the face of the country." Mr. Rose, an officer of engineers, who recently accompanied some elephant hunters in Southern Africa, was told by an experienced hunter that he had seen as many as three thousand in a troop on the bank of the Fish River: and that he and his Hottentots had killed eight hundred in twenty months. Mr. Rose was satisfied of their great numbers, from the paths which marked their progress in all directions through the country "which they have possessed for ages," where all "the roads are the work of the elephant." † Mr. Pringle, to whose communications we are so much indebted, has favoured us with a description of a herd of wild elephants, presenting a vivid picture of a scene which must be one of the most remarkable that can be presented to the eye in the deep solitudes of a tropical wilderness:

"A herd of elephants, browsing in majestic tranquillity amid the wild magnificence of an African landscape, is a very noble sight, and one of which I

^{*} Discoveries in Northern and Central Africa, p. 50.

[†] Four years in Southern Africa.

shall never forget the impression. It is difficult to convey in a brief notice an adequate idea of such a scene; but if the reader will, in imagination, accompany me on a short excursion into the wilderness, I shall endeavour to show him at least what the South Africans call the spoor—the vestigia of

a troop of elephants.

"During my residence on the eastern frontier of the Cape Colony, I accompanied a party of English officers on a little exploratory excursion, into a tract of country then termed the Neutral Territory, immediately adjoining to the location of the Scottish settlers at Bavian's River. This territory, which comprises an irregular area of about 2,000,000 of acres, had remained for several years entirely without inhabitants; for its native possessors, the Caffres and Ghonaquas, had been expelled from it in 1819 by the colonial forces, and no other permanent inhabitants had yet been allowed to occupy it. The colonists were even forbidden to hunt in it under severe penalties, and, in consequence of this, the wild animals had resorted thither in considerable numbers.

"The upper part of this extensive tract, into which we now penetrated, is an exceedingly wild and bewildering region, broken into innumerable ravines, encumbered with rocks, precipices, and impenetrable woods and jungles, and surrounded on almost every side by lofty and steril mountains. During our first day's journey, although we saw many herds of large game, such as quaghas, gnocs, hartebeests, koodoos, with a variety of the smaller antelopes, there was no appearance of elephants: but, in the course of the second day, as we pursued

our route down the valley of the Koonap river, we became aware that a numerous troop of these gigantic animals had recently preceded us. Footprints of all dimensions, from eight to fifteen inches in diameter, were everywhere visible; and in the swampy spots on the banks of the river, it was evident that some of them had been luxuriously enioving themselves by rolling their unwieldy bulks in the coze and mud. But it was in the groves and jungles that they had left the most striking proofs of their recent presence and peculiar habits. In many places paths had been trodden through the midst of dense thorny forests otherwise impenetrable. They appeared to have opened these paths with great judgment, always taking the best and shortest cut to the next open savanna or ford of the river: and in this way they were of the greatest use to us by pioneering our route through a most difficult and intricate country, never yet traversed by a wheel-carriage, and great part of it, indeed, inaccessible even on horseback, except for the aid of these powerful and sagacious animals. In such places (as the Hottentots assured me) the great bull elephants always march in the van, bursting through the jungle as a bullock would through a field of hops, treading down the thorny brushwood, and breaking off with his proboscis the larger branches that obstruct his passage; the females and younger part of the herd follow in his wake in single file: and in this manner a path is cleared through the densest woods and forests, such as it would take the pioneers of an army no small labour to accomplish.

"Among the groves of mimosa-trees, which were thinly sprinkled over the grassy meadows along the river margins, the traces of the elephants were not less apparent. Immense numbers of these trees had been torn out of the ground, and placed in an inverted position, in order to enable the animals to browse at their ease on the soft and juicy roots, which form a favourite part of their food. I observed that, in numerous instances, when the trees were of considerable size, the elephant had employed one of his tusks exactly as we should use a crowbar, thrusting it under the roots to loosen their hold of the earth, before he could tear them up with his proboscis. Many of the larger mimosas had resisted all these efforts; and, indeed, it is only after heavy rains, when the soil is soft and loose, that they can successfully attempt this operation.

"While we were admiring these and other indications of the elephant's strength and sagacity, we suddenly found ourselves, on issuing from a woody defile, through one of the wild paths I have mentioned in the midst of a numerous herd of these animals: None of them, however, were very close upon us; but they were seen scattered in little clumps over the bottom and sides of a valley two or three miles in length; some browsing on the succulent spekboom (Postulacaria afra) which clothed the skirts of the hims on either side; others at work among the mimosa-trees sprinkled over the low and grassy savanna. As we proceeded cautiously onward, and some of these parties came more distinctly into view (consisting, apparently, in many instances, of separate families, the male, the female, and the young of different sizes), the gigantic magnitude of the leaders became more and more striking. The calm and stately tranquillity of their deportment,

too, was remarkable. Though we were a band of about a dozen horsemen, including our Hottentot attendants, they seemed either not to observe, or altogether to disregard our march down the valley."

The neutral territory, in which Mr. Pringle saw the herd which afforded him the occasion for this description, had been without inhabitants for several years; and the elephants and other wild animals had resumed the dominion which the great tyrant, man, had quitted. It is the same in India. Sir Stamford Raffles, in his journey through the Southern Presidencies to Passumah, first fell in with numerous tracks of elephants, where a village had formerly stood. He passed over much ground which at one period had been in cultivation, but which had long remained in a state of nature. At another place, which had also been the site of a village, but where no place of human dwelling or cultivation was then to be found, he slept in a shed which his attendants erected, near a broad river. "During the night," says Sir Stamford Raffles, "we were awakened by the approach of a party of elephants, who seemed anxious to inquire our business within their domains."* A contest is incessantly going on between man and the inferior animals for the possession of the earth. Where civilization is established, the dominion is undisputed; but where man proceeds in his career of improvement by slow and solitary steps, he has to fight his way against those quadrupeds who resist his power till they find their resistance unavailing. If he recede, the lion and the elephant return to their ancient domain. Whatever man holds in this world must be held

> * Life and Correspondence, p. 315. D 2

by an unceasing exercise of his energy. If he neglect to maintain his ground by the same activity of intellect by which he has acquired it, an enemy starts up on every side. Even the commonest processes of nature require to be watched. They are either allies or foes. The sun, and the rain, and the dew, and the wind, are as much annoyances as assistants, unless they co-operate with an intelligence which directs them to good. If the lion break not into his fold, and the elephant tread not down his plantations, the minutest insects are at hand to injure his flocks and destroy his harvests, when the universal conqueror indolently ceases to defend his empire.

The elephant is, beyond comparison with others, the largest of all land animals. An old anatomist has properly described him as "animal vastissimum"—an enormous animal—and we may admit this description without adopting the exaggerated accounts of his height which have been so commonly circulated. Mr. Corse, who, perhaps, saw more Indian elephants than any other European, never heard of more than one elephant whose height much exceeded ten feet. This was a male belonging to the late Vizier of Oude. His dimensions,

as accurately measured, were as follows:

	ft.	in	
From foot to foot, over the shoulder	22	. 10	04
From the top of the shoulder, perpendicular height	10	. (6
From the top of the head, when set up	12	. :	2
From the front of the face to the insertion of the tail			Ĭ

The East India Company's standard for serviceable elephants is seven feet and upward measured at the shoulder, in the same manner that horses are

measured. At the middle of the back, which is curved, they are several inches higher. The height of a living elephant is exceedingly deceptive, even to those who are most accustomed to the animal. Mr. Corse measured a celebrated elephant of the Nabob of Dacca, which was generally stated to be fourteen feet high, and which he considered to be twelve; it was found not to exceed ten feet. elephants of Hindostan are, however, the smallest of the Asiatic species. Those from Pegu and Ava are much larger; and the skeleton of the elephant at the Museum at Petersburgh, which was sent to the Czar Peter by the King of Persia, measures sixteen feet and a half in height. Still, it is probable that few elephants of more than nine feet in height have been brought to Europe. Neither the male nor female which the French took from Holland were eight feet in height. The elephant of Hindostan has certainly not degenerated in size for several centuries; for the Emperor Baber (a contemporary of Henry VII.) observes, "they say that in some islands the elephant grows to the height of ten gez (about twenty feet). I have never, in these countries. seen one above four or five gez"* (eight or ten feet). That the Hindoos had a tolerable definite notion of the medium height of an elephant, as we have of that of a cow or a horse, may be collected from another passage in the same amusing book. where the writer, describing a cavity in a rock, says, "it was as high as an elephant." The African species is generally larger than the Indian. Mr. Pringle informs us, that he met with an enormous bull elephant (the Hottentots called him "a big ter-* Memoirs of Baber, p. 316.

rible fellow, plenty, plenty big"), which two engineer officers agreed was fourteen feet high. jor Denham, on his expedition to the Tchad, fell in with elephants which he guessed to be sixteen feet in height: but one which was killed in his presence. and which he describes as an immense fellow, measured nine feet six inches from the foot to the hipbone, and three feet from the hip-bone to the back. making a height of twelve feet six inches. phant even of eight feet is, indeed, an enormous creature: and it is difficult to form an adequate idea of his bulk and stature from any description. small cell, also, his size cannot be correctly appreciated. According to the principles of perspective, a large object is not properly seen unless we are removed to about three times the distance of its height and size. In a favourable situation, such as a large enclosure or theatre, where the proportions of the animal are well displayed, and he is seen in action, with man by his side, some notion may not only be formed of his vastness, but the mind may be incited to the contemplation of those arrange. ments of Providence by which a creature of such prodigious bulk is enabled to provide his daily sustenance without difficulty in a natural state; and is endued with every requisite bodily activity and mental energy, for the enjoyment of existence in as great perfection of content as the squirrel which leaps from tree to tree, or the wild horse which gallops over boundless plains in search of the greenest pastures.

It seems agreed that a large elephant weighs from six thousand to seven thousand pounds. Of this weight the carcass is about four fifths. To

support such a structure, the legs must be solid and compact; formed more with regard to strength than flexibility: fitted, in fact, to bear an enormous weight on a level surface, without any violent strains produced by sudden bounds, or by the necessity of ascending or descending great elevations. That the elephant was designed for this equability of motion is evident from its want of the elastic ligament which, in almost all quadrupeds, connects the head of the thigh-bone with the pelvis, and which gives the hind legs power to resist the strain which is produced by moving upon irregular surfaces.* The elephant is indeed found in the neighbourhood of mountainous ranges; and, under the command of man, certainly ascends rocky passes, bearing a considerable weight; but that such a service is a violation of his natural habits is evident from the fact that in these situations he is liable to fall backward. not having that power of resistance in his hind-legs which enables many other quadrupeds to move in safety over craggy ground. Bernier, in his amusing "Travels in the Mogul Empire," indeed, states that, "though heavy and unwieldy, these animals are yet sure-footed, feeling their way when the road is difficult and dangerous, and assuring themselves of the firm hold of one foot before they move another."† But this very caution indicates that the elephant is placed in an unnatural situation when he is required to ascend craggy steeps, and that his great sagacity alone enables him to overcome the difficulty. Bernier himself describes a remarkable accident which he witnessed, proceeding from this

^{*} See Home's Comparative Anatomy, vol. i., p. 95.

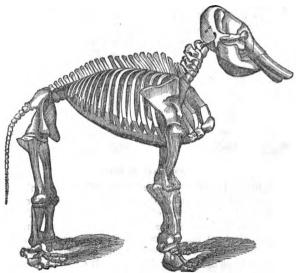
[†] Bernier's Travels translated by Brock, vol. ii., p. 129.

mode of compelling the elephant to a labour for which he is unfitted by nature: "The king (Au-rengzebe) was ascending the Peer-Punchal mountains, and from which a distant view of the kingdom of Kashmire is first obtained. He was followed by a long line of elephants, upon which sat the ladies in mik-dembers and amaris.* The foremost, appalled, as is supposed, by the great length and ac-clivity of the path before him, stepped back upon the elephant that was moving in his track; who again pushed against the third elephant, the third against the fourth, and so on until fifteen of them. incapable of turning round or extricating themselves in a road so steep and narrow, fell down the precipice. Happily for the women, the place where they fell was of no great height; only three or four were killed; but there were no means of saving any of the elephants. Whenever these animals fall under the immense burden usually placed upon their backs, they never rise again, even on a good road. Two days afterward we passed that way, and I observed that some of the poor elephants still moved their trunks."+

The peculiarity of the progressive movement of the elephant is generally attributed to the weight of his body; and it is so different from the motion of other animals with which we are familiar, that we are in the habit of hastily calling the conformation which produces it a deformity. We "cannot allow that it is deformed, since those due proportions laid down by the Author of Nature are as well observed in this as in any other animal; for nothing can be deformed but what swerves from a

Seats with canopies † Bernier, vol. ii., p. 149.

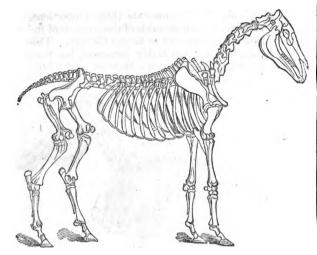
general rule."* To illustrate these proportions, we have had a drawing made of the skeleton of the elephant which was shot at Exeter Change. This skeleton, which is admirably preserved, has been set up with great skill at the Museum of the London University.



Skeleton of the Elephant shot at Exeter Change.

To understand the progressive motion of the elephant, it will be desirable to compare the bones of his legs with those of the horse. For this object we add a representation of the skeleton of the

* Blair on the Elephant, Phil. Trans., vol. xxvii.



Skeleton of the Horse.

latter. It will be obvious that, without reckoning the joint which unites the hoof, the horse has three bones in the leg, the elephant has two. For this reason the horse moves with an elastic pace, while the elephant has a grave and stiff progression; and this want of elasticity renders it disagreeable to ride on him for any distance. It will be evident also, from an inspection of the two skeletons, why the horse, in kneeling, brings his hind-legs under his body, while those of the elephant go behind him, exactly in the same way as man kneels.

The legs of the elephant are supported upon broad hoofs, each terminated, in the adult animal,

by five nails. The whole number of nails is seldom developed on the kind feet. The author of Oriental Field Sports says, "To please a native, there should be five on each fore-foot, and four on each hind-foot: odd numbers are considered by them as unlucky.* I have known some with fifteen nails, which no native would purchase; and I have heard of one with twenty: but I do not recollect seeing one with more than eighteen." The sole of an elephant's foot is nearly circular; and in one of eight feet high is about twelve inches in diameter.

Supported, then, upon these solid pillars, an elephant moves forward in search of food. is wholly vegetable. The intestines are formed upon the same principle as in the horse. It has been observed by Sir Everard Home, that "the colon in animals that live upon the same species of food is of a greater length in proportion to the scantiness of the supply. Among quadrupeds, this may be illustrated by the length of the colon in the elephant being only twenty feet six inches, while in the dromedary it is forty-two. The first inhabits the fertile woods of Asia, the latter the arid deserts of Arabia." + Many other "remarkable facts and striking analogies make it clear that some process goes on in the colon, from which a secondary supply of nourishment is produced." The elephant, from the simple construction of his stomach and intestines, which require frequent supplies; from the great quantity of food which he consumes for his ordinary support; from the waste which is

^{*} This is almost the only exception to the universal faith in odd numbers.

[†] Comparative Anatomy, vol. i., p. 470. E

necessarily produced by the weight and bulk of his body; and from the conformation by which he is fitted to move upon level ground, is evidently the natural inhabitant of rich plains, where vegetation attains its utmost luxuriance, where the grass of the green savannas is ever kept fresh by perennial springs, and where the woods never cease to offer him their succulent shoots, which he delights to crop with his "lithe proboscis." A passage in Job which, principally under the authority of Bochart, has been applied to the hippopotamus, is considerered by many learned commentators as referring to the elephant. The following words certainly describe, with great accuracy, the natural haunts of the elephant: "He lieth under the shady trees, in the covert of the reed and fens. The shady trees cover him with their shadow; the willows of the brook compass him about."* Thus, then, in

"The flowery lap Of some irriguous valley,"

the elephant has to seek his daily food. But how is he to crop the store which nature has provided for him? The head of the horse is attached to his neck by a flexible series of vertebre, which he can move at his pleasure; which he can arch in a graceful curve when he is proud and delighted, or throw upward with inflated nostrils when he is angry; by which he can graze without depressing his legs, or browse without elevating them. The head of the elephant is supported upon a very short, and, therefore, stiff series of vertebre, which, by reason of their conformation, offer little more than a pivot upon which the animal can move his head, in a

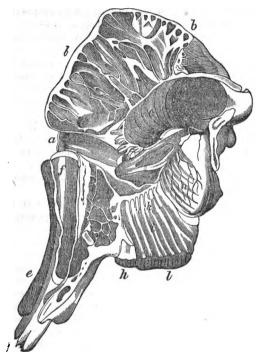
* Job xl., 21, 29;

limited degree, from side to side, but which prevent him either elevating or depressing it so as to procure his food. His enormous tusks, too, would, in some situations, prevent him conveniently reaching his sustenance, even if he could give his head the requisite movement. It is evident that the animal could not exist if nature had not provided him with an instrument of peculiar construction for supplying all his necessities.

Before we proceed to a description of the elephant's proboscis, it may be convenient to exhibit a section of the head, which offers some very remarkable peculiarities of conformation, as it evidently must do from having such singular attach-

ments as the proboscis and the tusks.

The engraving represents the cranium of an Indian elephant, cut vertically. a is the opening of the nostrils; bb, the sinus which separates the two tables of the scull; c, the cavity of the brain. shall explain other parts as we proceed to another division of the subject. The two tables of the scull are separated from each other by numerous bony processes, between which there is a vast number of cells, communicating with the throat by means of the eustachian tube, and filled with air, instead of the medullary substance which occupies the same space in other animals. The structure is peculiarly adapted to the purposes of increasing the surface for the attachment of those large muscles which belong to the lower jaw, proboscis, and neck of the elephant, and of augmenting the mechanical power of these muscles by removing their attachments to a greater distance from the centre of motion. These advantages are attained by the cellular structure



Section of the Scull of the Elephant.

which we have just described, without augmenting the weight of the head; a precaution especially necessary in the present instance, as the head is more heavy and massy in this than in any other animal. The air-ceils of birds in general, and particularly those which pervade the scull of the ostrich, eagle, and owl, present examples of a similar formation, attended with the same uses, viz., those of increasing the bulk and strength of the

bone, and diminishing its weight.

That this cavity of the scull is required to support the weight of the tusks in particular, which act as great levers, is proved by the growth of the tusks corresponding with the enlargement of the cranium. The cavity may also serve as a protection to the brain; for although the frontal bone is enormously thick, the animal is exposed to the most violent concussions in making his progress through the woods. Capt. Knox, in his account of Cevlon, says, "it is their constant practice to shove down with their heads great trees, which they love to eat, when they be too high, and they cannot otherwise reach the boughs." The compensating power of the great cavity of the scull for bearing the trunk and the tusks, is superadded to the ordinary means of suspensory ligaments, which are invariably found in quadrupeds which "must needs hold their heads down in an inclining posture for a considerable time together, which would be very laborious and painful for the muscles."* The opening in the scull called the "great occipital foramen" is, in most quadrupeds, obliquely situated at the base of the scull, whereas in man it is nearly parallel with the horizon, and almost in the centre of the base of the scull. The great occipital foramen transmits the spinal marrow; and the variations in the situation of this opening, in man and in animals of analogous structure, are important

* Ray's Wisdom of God.

when viewed in connexion with the ordinary position of the body. In man, who is designed to hold his body erect, this opening is situated, as has been stated, nearly in the centre of the base of the scull: the head, therefore, is supported nearly in a state of equilibrium on the spinal column. But in quadrupeds it is situated farther back in proportion as the face is elongated; and, instead of being nearly parallel to the horizon, it forms a considerable angle with it. Hence the weight of the head in these animals is not sustained by the spine, but by a ligament of immense strength, which is either wanting in the human subject, or so inconsiderable as to have its existence disputed. This is the ligament of the nape, called by butchers the pax-wax: and the tough, strong, tendinous substance of which it is composed must be familiar to every one who has ever carved a neck of veal, and driven the knife against it. The head of an ox or a horse is a heavy weight acting at the end of a long lever, consequently with a great purchase; and from this force, thus advantageously applied, the bones of the neck would be in constant danger of dislocation is they were not fortified by this strong tape. It is of immense size in the elephant, the vast weight of whose head, so much augmented by the enormous size of the tusks, sufficiently accounts for the increased magnitude of the suspensory ligament.

In the elephant the facial line—that is, the vertical height of the scull, when compared with its horizontal length—is elevated by causes which have no connexion with the volume of the brain. From this circumstance, the elephant acquires an appearance of great sagacity in the eyes even of common

observers; and the ancients, who attached great importance to the form of the scull, attributed to him the most exalted intellectual endowments. In the same way, the owl, whose scull is elevated without a proportionate volume of the brain, was the emblem of Wisdom among the Greeks. Modern naturalists appear to have gone to the other extreme; and, finding that the volume of the brain bears no relation to the external appearance of the elephant's scull, are disposed to deny the quadruped that sagacity which he really does possess.

The proboscis or trunk of the elephant has commanded the admiration of all who have witnessed its remarkable powers. The child and the philosopher, the refined Roman and the rude African, have equally been struck with its astonishing union of flexibility and strength. Cicero calls it. by a bold figure of speech, "the elephant's hand;" Lucretius, even more expressively, describes it by the word "anguimanus," the snake-hand; and the Caffre, who has learned nothing from the poets and orators, but is taught by nature alone, when he kills an elephant, approaches the trunk with a superstitious awe, and, cutting it off, solemnly inters it, repeatedly exclaiming, "The elephant is a great lord, and the trunk is his hand."*

Before we proceed to a description of the uses of the trunk, we shall present, as clearly as we can, a view of its anatomical construction. precise details of this somewhat complex subject are those given by Cuvier upon his dissection of two elephants.+

^{*} Rose's Southern Africa, p. 155. † See Leçons d'Anatomie Comparée, tem. v.

The author of the "Anatomical Account of the Elephant burned at Dublin" was not allowed to dissect the trunk; but he says, "where the fire had entered upon it, I could distinctly perceive three orders of fibres; one obliquely and spirally descendng; another spirally but crosswise descending; the third were strait fibres." He adds, "several of the motions of his probocis might be performed by the afore-mentioned three distinct series of muscular fibres; as its contraction, motion up or down, to the right or to the left; but by what means he was able at pleasure to shoot it out, from a foot, upon any sudden occasion, to five feet long, and that with extraordinary force, I cannot clearly perceive." This is the problem which later anatomists have endeavoured to solve. The trunk of the elephant has neither bone nor cartilage; and this constitutes the peculiarity of the mechanism, and involves the difficulty of exactly understanding its mode of operation; for "we do not find any part without a bone except this, that is spontaneously protruded or prolonged, and so kept for some time."*

The centre of the trunk is pierced throughout by two long canals, which are the prolongations of the nostrils, and which are separated one from the other by a fatty substance about the third of an inch in thickness. In their whole course these channels are nearer the fore part of the trunk than the hind; and they preserve the same diameter almost throughout, till they come as high as the centre of the bone (os intermaxillare) in which the tusks are planted. At this point they suddenly turn, to approach the anterior surface of this bone, making a semicir-

^{*} Anatomical Account of the Elephant burned, &c., p. 32.

cular curve. They are so compressed at this point. that unless there be a muscular action of the animal to dilate them, they operate as valves to prevent the ascent of any liquid to a higher point. Beyond this curve the canals again widen, and are curved back to approach the bony part of the nostril. elephant, by this construction, can use the trunk as a reservoir for water, drawing the liquid up by suction to a certain point, beyond which it cannot Cuvier considers that the trunk is not in itself an organ of smell, because the passage of any liquid through the canals would be incompatible with the delicacy of the membrane with which the nostrils in the head are lined. That membrane in man is sensibly affected with pain when any liquid enters the nose; and for the same reason, the sense of smell does not exist in the nostrils of those cetaceous animals that are constantly using them as a passage for water, such as the whale, that makes them operate as a jet-d'eau. The sense of smell in the elephant, according to this great comparative anatomist, is confined to that part of the nostrils which is enclosed in the bones of the head.

The muscles of the trunk give to these two canals which we have described whatever inflexions the animal desires. Although these muscles are of an extraordinary number, they may be reduced to two principal classes: those which form the body or the interior part of the trunk, and those which encompass it. These latter are all, more or less, longitudinal; that is, they begin at the circumference of the base of the trunk, and are prolonged, more or less directly, towards its point. The other class of muscles are all transverse, and cut the

axis of the trunk in various directions. It may assist this description to append a copy of the sec-

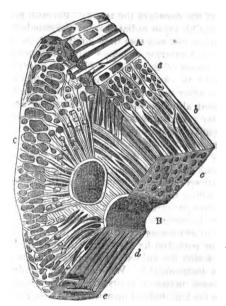
tions of the trunk given by Cuvier.*

The longitudinal muscles are divided into anterior, posterior, and lateral. The first, which are affixed to the frontal bone, form an innumerable multitude of bundles, which all descend parallel to each other, and which are alternately contracted by tendinous intersections placed at short intervals. The second, originating in the intermaxillary bones, form two beds, divided one from the other into a great number of little bundles, whose direction is oblique. The lateral muscles form two pairs, which are in some degree analogous to the muscle of the upper lip.

The use of these different longitudinal muscles is sufficiently evident. When they are moved altogether, the whole of the trunk is shortened. When those on one side only are moved, the trunk is bent on that side. But farther, the division of these muscles, and the tendinous intersections of the anterior class, enable the animal, at his pleasure, to shorten or to bend certain portions only of his trunk, while the rest remains prolonged, or even bent in a contrary direction. In consequence, there is no sort of curve, says Cuvier, which the animal, by their means, cannot give to this instrument.

The small muscles which form the interior of the trunk are all very distinct one from the other; and are all terminated by slender tendons, of which some cross the beds of the longitudinal muscles, to be attached to the exterior membrane which covers all the trunk, and others are planted in the mem-

* Anat. Comp., vol. v., pl. kaix.



Sections of the trunk of the Elephant.

A. Horizontal section, in which we see the small transverse muscles cut: some (a) across; others (b) in their length.

B. Vertical section in length, which has divided the nasal canal of the left side. The small transverse muscles which are seen in their length at b, are cut across at c; other small muscles of the same kind are seen at their length at d. We see in their length, at c, the antagonists of these transverse muscles; that is, the small longitudinal muscles.

C. Vertical section across. The small transverse muscles are seen in their length. They have various directions, not precisely radiating from the axis to the circumference, though their course is always across. They are all within the bed of the small longitudinal muscles which the section has divided across. The principal nerves and bloodvessels are also shown in this section; as also the two canals of the trunk.

section; as siso the two causis of the stully

brane of the canals of the trunk. Perrault consid. ered that all these radiated from the canals to the circumference, and that they diminished the diameter of the exterior envelope without diminishing the diameter of the canal. This, however, is not the case: two sets of the muscles have this effect. but the other set certainly lessen the diameter of the canal, although their action can never shut the nostrils. All the transverse muscles are plunged in a cellular tissue, uniformly filled with fat. They are the antagonists of the longitudinal muscles. Cuvier adds, that in their contraction they compel the trunk to elongate entirely or in part; for their separations enable the animal to exercise them exactly within the limits which he desires. In the preceding paragraph, which is also translated from Cuvier, he assigns to the longitudinal muscles the power of shortening or of bending the trunk entirely or in part, and he says that "there is no sort of curve which the animal, by this means, cannot give to this instrument." We must bear in mind the difference between contraction and elongation. When the longitudinal muscles are at rest, the trunk remains extended to its natural length; when they are in use, it is bent or contracted. But there must be another power to elongate the instrument with force and precision after it is wholly or partially contracted. We must discover a mechanism which, without bone or cartilaginous rings, enables the animal "at pleasure to shoot it out, from a foot, upon any sudden occasion, to five feet long, and that with extraordinary force." This power must be found in the transverse muscles. The first object of the transverse muscles, or, rather, of two sets of them, is to keep the canals open, while the trunk is curved in various ways; for it is evident, if there were no such power, the passages would be shut, as is the case when we attempt to give contrary and sudden flexures to any elastic tube. Their second object is to elongate the trunk, and to assist in the direction of its movements. Being connected with the inner and outer membrane—that is. being attached to the membrane which covers the trunk and that which covers the canal-they can readily diminish the space between the two substances by their contraction. At the same time, it is evident that, when the length of these muscles, from membrane to membrane, is diminished by their contraction, their thickness, which is in the direction of the length of the trunk, must be proportionally augmented; while, on the other hand, the thickness of the longitudinal muscles, which is in the direction of the width of the trunk, is proportionally diminished. From this formation it results that the trunk is more or less elongated, as the transverse muscles are more, and the longitudinal muscles less, employed. The limit to this extension of the trunk is, of course, the relaxation which the longitudinal muscles admit of before they begin to react; and, just in the same manner, the resistance of the transverse ones is the limit to the shortening in length produced by the action of the longitudinal The two classes of muscles are, therefore, called antagonist. The simplest popular view of the matter is to say, that when the trunk is shortened, it is thickened; and when it is lengthened, it is rendered thin: and the only difference between these operations and the production of the same changes in an elastic tube of Indian rubber, consists in the moving force of the trunk being in the organ itself, and distributed among the almost infinite number of muscles which that organ contains. this way, the force is multiplied by the action of the will of the animal upon a vast number of points; and although the bellying of a few muscles may scarcely produce any visible motion, the repetition of the same action by many thousand muscles will effect that sudden extension which appeared so wonderful to the Dublin anatomist. The difficulty there may have been in comprehending the peculiarity of the action of the trunk is not surprising, when we consider that the instrument is altogether constructed upon principles different from common muscular action; and that the power of the mechanism is balanced by an almost infinite number of these small muscles, not more than the twelfth of an inch each in thickness.

The extent of the command which the animal possesses of his trunk, may be estimated from the fact, which Cuvier has ascertained, that the muscles of this organ which have the power of distinct action are not far short of forty thousand. We need not, therefore, be surprised if this instrument be strong enough to tear up a tree, and delicate enough to seize a pin. There is no animal structure in the least like the trunk of the elephant; but, though the mechanism is unique, it is altogether complete for its purposes.

The trunk of the elephant is terminated, as is well known, by an extremely flexible prolongation of the muscles, destined to seize whatever the animal desires. This may be considered his finger. Qp.

posed to this is a sort of thumb, which enables him to hold fast the object which he wishes to take up. Between the finger and thumb are the extremities of the nostrils.



There is some difference in the external appearance of the extremity of the trunk of the male and female elephant. The following cuts are from drawings made by Houel, from the male and female elephants of the Jardin des Plantes:





Entremities of the proboscis. A, of the male; B, of the female.

The trunk of the elephant may be first regarded as an instrument for collecting his food. He feeds upon all vegetable substances, from the leaves of trees and the coarsest grass, to the most farinaceous grain and the choicest fruit. Though his enormous bulk, requiring that his provender shall be in large quantity, renders a plentiful supply of the commoner vegetable productions necessary to him, yet his palate is pleased with delicacies. For this reason the strength and the minute touch of his proboscis are equally available in the collection of his daily supplies. If he meet with long herbage, he twists his trunk spirally round the roots and crops them off.



The bundle which he gathers is then held between what we have called the finger and thumb of the trunk, and is thus conveyed to the mouth:



If the objects which he is collecting are too small to repay him for the trouble of carrying them to his mouth, he holds them one by one behind his thumb, till he has gathered enough for a load. Thus, if he find a small root, he seldom eats it at once, but collects two or three, holding each in the following manner:—



When the object which he wants requires force for its removal, or is difficult to reach, he completely curls his trunk, thus

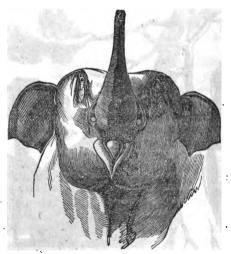


and in this way, elevating himself upon his hinder legs, he pulls down the tall branches of the trees of the forests which are his natural domain.*



The cut representing this is from M. Houel's work.

The mode in which the elephant conveys his food to his mouth will be best understood by the following representation, which shows the animal reaching upward with his trunk. He has no power to apply his mouth to the food to be taken (with the single exception of the mode in which the young elephant sucks); and, therefore, whether he gather the supply below or above his head, the substance gathered is introduced into his mouth by the inward flexure of the proboscis. The food then receives its due mastication.*



A country full of succulent plants, and plentifully supplied with showers and pools, is the natural

* See chap. iii.

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abode of the elephant. Copious draughts of water are necessary to his existence. His trunk is the instrument by which he collects his liquid sustenance. By drawing in his breath he receives the necessary supply into the channels of his trunk, and, when he pleases, discharges it into his mouth. Perhaps a partial contraction of the diameter of the tubes of the trunk, which Cuvier has shown to be a necessary consequence of the formation of one set of the transverse muscles, may assist this operation; it is extremely difficult, if not impossible, otherwise to understand how the animal can eject



the liquid from his mouth by his breath, while he is drinking at the same instant. It is an error of some writers who state, that the large cavity of the head is a reservoir for the liquid which the animal takes up in his trunk; it is held in his trunk by the action of his breath, but no part can pass beyond the sudden curve of the channels into the nostrils themselves, and thence into the head. When the elephant ejects the water from the trunk to the mouth, a gurgling sound is produced by the passage of the air; the lips are motionless.

As an organ of touch, the proboscis of the elephant is exquisitely fine. Elephants sometimes go blind; and, under that privation, the poor animal can not only collect its food and discriminate as to its quality by this wonderful instrument, but can travel, without much difficulty, over unequal ground, avoiding lumps and hollows, and stepping over ditches. The creature, under such circumstances, rarely touches the ground with its trunk; but, projecting it forward as far as possible, lets the finger, which is curled inward to protect the nostrils, skim along the surface, to the inequalities of which this organ adjusts itself with wonderful exactness.*

The great care of the elephant, whether he be in a state of nature or under the control of man, is invariably to put his trunk out of harm, as far as he can, when any danger presents itself. If he is attacked by a tiger or any other wild animal, he carries his trunk as high as he can in the air; and if this delicate organ be in the slightest degree injured, the elephant becomes wild with rage and terror. He is even afraid of a dead tiger, and care-

^{*} See Williamson, p. 78.

fully puts his trunk out of reach. The instinct by which the creature defends and preserves this precious instrument is in proportion to its paramount importance. Mr. Williamson saw an elephant whose trunk had been cut through with a bill-hook: and though the wound was healed, the animal was perfectly helpless, unable to supply its own food, and incapable of even travelling without danger. He was fed with bundles of grass, which were put into his mouth; had he been in a state of nature. he must have perished. An affecting example of the instinct with which the elephant preserves his trunk, is exhibited in the death of the poor animal who was burned at Dublin. The author of the Anatomical Account says, "Doubtless the elephant's care to preserve the proboscis was great; for when we dissected him we found it thrust near two feet into a very hard ground; upon which account we thought it had been burned, till the head was divided from the body, and then we found it kept fast to the ground by the proboscis."

The care with which the elephant endeavours to put his trunk out of danger makes him extremely cautious of using it as a weapon. He rarely strikes with it, though he will frequently throw clods and stones with it at objects which he dislikes. Elephants often thus attack hogs, casting their missiles with tolerable force and precision.* This fact is a confirmation of Busbec's account of the animal playing at ball. One of the elephants in the Jardin des Plantes is extremely expert at playing with a log of wood, which it will often do, to the great amusement of the crowd.

* Williamson.

The power of crossing rivers must be essential to the existence of the elephant in a state of nature; for the quantity of food which a herd of elephants consume renders it necessary that they should be constantly moving from place to place. The elephant crosses a stream in two ways. If the bed of the river is hard, and the water not of too great a depth, he fords it. It is a matter of indifference to him whether his body be completely immersed in the water; for as long as he can bring the tip of his trunk to the surface, so as to breathe the external air, he is safe. But the elephant will require to cross the largest rivers as well as the smallest brooks in his search for food; and it may even be requisite for him to pass such mighty waters as the Ganges and the Niger. The elephant swims deep; so deep that the end of his trunk only is out of the water. With this instrument for breathing, he trusts himself fearlessly to his native rivers. In a state of captivity, he is somewhat more cautious; although a well-trained elephant will readily swim, or wade with his driver on his back. This situa. tion is, however, sometimes one of danger to the



rider; for the animal, regardless of the mohout, whom he has completely in his power, will sink his body greatly below the surface, having this faculty of breathing through the end of his trunk; and then the frightened driver has no resource but to stand upon his back.

CHAPTER III.

THE STRUCTURE OF THE ELEPHANT, EXHIBITED IN CONNEXION WITH ITS NATURAL HABITS—CONTINUED.

THE construction of the elephant's head indicates that its scent is remarkably acute. Anatomists point out the excellence of its organ of smelling, in the complicated formation of the ethmoid bone, and the largeness of the frontal sinuses.* As elephants live in troops, and yet must often disperse for the collection of their food, it is a necessary condition of their existence that they should have such an acuteness in the organs of smelling and hearing as will enable them to gather together without diffi-These organs are of more importance to them than that of sight; for in thick woods and high jungles, in which they generally abound, the eve would avail little in directing them to particular spots, either for food or society. The eye of the elephant is unusually small. This compara-

See Lawrence's and Coulson's Translation of Blumenbach, p. 272.

tively diminutive size of the eye assists in its protection from injury amid the bushes where he seeks his food: and it is provided with a nictitating membrane, by which he is enabled to free it from all noxious substances, such as broken leaves and insects. Small as the eye is, it is by no means an imperfect organ, although he cannot direct its range above the level of his head. The trunk supplies the deficiency; and the sense of smelling directs the organ of touch to such food as he gathers from trees. His sense of smelling is in all respects much more powerful than his sight. Sparmann. an African traveller, gives an example of this in the adventure of a native who was chased by a large elephant, to his great terror, under circumstances where he fancied himself secure. His words, in describing his conviction of the elephant's powerful sense of smelling, were these: "With respect to the place I was in at first, I am certain that the animal could not see me, and, consequently, that he first found me out by the scent." Corse says that elephants discover a tiger-track readily by the smell

The structure of the elephant's ear has been investigated with great accuracy by Sir Everard Home.* The drum, and every other part of the organ, are much larger in proportion than in other quadrupeds or in man; and there is a remarkable difference in the arrangement of the muscular fibres of the drum of the elephant's ear, when compared with man and some other quadrupeds. In the human ear, these fibres are radii of a circle; and in the horse, the hare, and the cat, they are of a uni-

^{*} Comparative Anatomy, vol. iii., Lecture ix.

form length. But in the elephant's ear these fibres are so placed that some are more than double the length of others. Sir Everard Home argues from this remarkable construction that the elephant has not a musical ear; but that it has a peculiar compensating power in this length of fibre, as its slow. er vibrations enable it to hear sounds at a greater distance: and this opinion is still farther sustained by the structure of the different parts of the internal organ, more particularly the cells between the tables of the scull. Sir Everard Home illustrates his position that the elephant hears farther than other animals, and particularly that his hearing is more acute than that of man, by the following statements, which he gives upon the authority of Mr. Corse:

"A tame elephant, who was never reconciled to the sound of a horse moving behind him, although he expressed no uneasiness if the horse was either before or on one side within his view, could distinguish the sound of a horse's foot at a distance some time before any person in company heard it. This was known by his pricking up his ears, quickening his pace, and turning his head from side to side.

"The cells in the scull of the elephant explain the sounds from the ground striking his ear with more force; and explain an assertion very generally believed, that an elephant, when he comes to a bridge, tries the strength of it with his foot, and, if his ear is not satisfied with the vibration, nothing can induce him to pass over it.

"A tame female elephant, who had a young one, was occasionally sent out with other elephants for

food, without the young one being allowed to forlow. She was not in the habit of pining after her young one unless she heard its voice; but frequently, on the road home, when no one could distinguish any sound whatever, she pricked up her ears, and made a noise expressive of having heard the call of her young. This, having occurred frequently, attracted Mr. Corse's notice, and made him, at the time when the female elephant used such expressions, stop the party, and desire the gentlemen to listen; but they were unable to hear anything till they had approached nearer to the place

where the young elephant was kept."

That this acuteness of hearing was implanted in the elephant for a wise purpose, we can have no doubt; for in the whole animal creation we constantly find that means are adapted to ends; that no being is endowed with a peculiar power, without, at the same time, having a peculiar mode of employing it. As surely as the extraordinary scent of the lion conducts him to his prey, and the more wonderful sight of the vulture informs him where the carcass has fallen, so is the acute organ of hearing in the elephant intended to promote some great object of his animal and social economy. Let it not be forgotten, that as he is by far the largest of terrestrial creatures, he would be constantly exposed to peril from his own enormous weight. unless he had senses delicate enough to avert this peculiar evil. That his organ of touch is exquisitely fine, we have already seen; and when this is conjoined with an equally sensitive organ of hearing, we can understand why the elephant so rarely treads upon surfaces which are unable to

support him; why he equally avoids the pitfall and the slough; why, although he delights in water, and cannot comfortably exist in places where there are no opportunities of drinking and bathing at his pleasure, he is scarcely ever betrayed by the slimy coze or the shifting sand, but seeks those rivers where the bottom is hard, and upon which he can stand as fearlessly as upon the gravelly plain. elephant, as we have repeatedly mentioned, is a social animal; yet, from the quantity of provisions which each requires, the individual must feed apart from the herd; the male separated from the female, the young from the old, the mother, perhaps, from her little one. But the elephant has an expressive organ of voice. The sounds which he utters have been distinguished by his Asiatic keepers into three kinds. The first, which is very shrill, and is produced by blowing through his trunk, is indicative of pleasure; the second, prcduced by the mouth, is a low note expressive of want; the third, proceeding from the throat, is a terrific roar of anger or revenge. It will be perceived why an animal, which in some degree owes its safety to its social qualities, and which, individually, is unwilling to engage in a contest with the fiercer beasts of prey, should have the means of understanding, by the distant voice of its fellows, when there is a common danger at hand; and, at the same time, should have his organ of hearing sufficiently acute to distinguish the cry of hunger from the scream of terror, and both from the shrill pipe of satisfaction.

But the elephant may be endued with this acute hearing, in addition to his exquisite touch, for the protection of the lesser animals from the accidents to which they would be subject from lying in his nath. He has an extraordinary dislike to all small quadrupeds. Dogs running near him produce a great annoyance; if a hare start from her cover, he is immediately alarmed; and that pigs are his aversion has been recorded by every naturalist from Pliny to Buffon. It is even mentioned by Procopius, the historian of the Persian and Gothic wars, that at the siege of Edessa, by Chosroes, king of Persia, in the time of Justinian, the besieged Greeks employed the cry of a pig to frighten from the walls the elephants of their enemy. The old naturalists explained this peculiarity by the doctrine of antipathies; in the same way that they affirmed that the elephant was fond of an ox. upon the principle of sympathies. It may appear something equally fanciful to suggest the possibility that the elephant may dislike the smaller animals to come in his way from his instinctive disinclination to destroy them by an accidental tread. He always avoids a contest with inferior quadrupeds wherever he can; and if a helpless living creature. such as an infant or wounded man, lie in his way, he will remove the object. The elephant is naturally gentle; anxious alone to procure his own food without molesting others. That he is so is a merciful as well as a wise dispensation. If he had possessed a ferocity equal to his power, he must have exterminated a very large part of the animal creation.

Sir Everard Home is of opinion, that the elephant has not a musical ear; but, however this may be, the animal is evidently not insensible to musical aounds. We have observed the female elephant at Mr. Cross's menagerie bring forward her ears, as the guards have marched from the adjoining barrack to the loud notes of a military band; and the motions of her restless body have certainly been adapted to the movement of the air, which she gave evidence of having heard. Sir Everard Home presents us with an example of the power of the elephant to discriminate between the two great properties of musical sounds; a different capacity, certainly, from that of a musical ear, but still very remarkable:

"As a matter of curiosity, I got Mr. Broadwood to send some of his tuners with a pianoforte to the menageries of wild beasts in Exeter Change, that I might know the effect of acute and grave sounds upon the ear of a full-grown elephant. The acute sounds seemed hardly to attract his notice; but as soon as the grave notes were struck, he became all attention, brought forward the large external ear, tried to discover where the sounds came from, remained in the attitude of listening, and, after some time, made noises by no means of dissatisfaction."

An experiment upon the musical capacity of the elephant was made upon the male and female of the Jardin des Plantes in 1798. The result is described at great length in the "Décade Philosophique," a periodical work of that time; and, making every allowance for the apparent exaggerations of some of the statements, it seems tolerably certain that the elephants were differently affected by different pieces of music: although we may suspect that the enthusiasm of the musician had something to do with the assertion, that the tender air of char-

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mante Gabrielle plunged them into a species of voluptuous languor, and that the lively movement of ça ira roused them to an extraordinary state of excitement. The whole narrative certainly adds some confirmation to the account which Ælian gives of the modulated dance of the elephants of Germanicus.

We have seen that the elephant rarely uses his trunk as a weapon. But nature has given him most formidable means for resisting his enemies. His tusks, or, as the French naturalists more properly call them, his défenses, enable him not only to clear his way through the thick forests in which he lives, by rooting up small trees and tearing down cross branches, in doing which service they effectually protect his face and proboscis from injury; but they qualify him for warding off the attacks of the wily tiger and the furious rhinoceros, often securing him the victory by one blow, which transfixes the assailant to the earth. At particular seasons, when the passions of the male elephant are furiously excited, the more powerful of the herd will wound or destroy the weaker with their tusks. Mr. Corse thus saw a stately male elephant gore two small elephants in the midst of the herd in a terrific man-"When the poor animals were thrown down, conscious of their impending fate, they roared most piteously; but, notwithstanding their prostrate situation and submissive cries, he unfeelingly and deliberately drove his tusks through, and transfixed them to the ground."* Large male elephants, which in Hindostan are called goondahs, are often found wandering from the herd; and the natives * Phil. Trans., 1799.

believe that they are driven from the community as a punishment for their ferocious excesses. Mr. Corse, however, doubts this; and he states that, at the display of rage which he witnessed, "none of the large elephants, not even the dams of the sufferers, came near to relieve them."

Though the opinion has long been exploded that the elephant is unable to lie down, it is probable that, as he advances in age, he often sleeps in a standing posture. The popular notion was, according to Sir T. Brown, that "it sleepeth against a tree; which the hunters observing, do saw it almost asunder; whereon the beast relying, by the fall of the tree falls also down itself, and is able to rise no more." When an elephant is first taken by the hunters, he will seldom lie down to sleep for several months; and some have been known obstinately to stand a year at the place where they were picketed. When they are sick, they pertinaciously stand as long as they are able; if they lie down, no hope of recovery remains."* We have seen that Mr. Cross's elephant would not lie down unless her keeper were in her den; and it is probable that, in a wild state, when the elephant is at all disturbed or apprehensive of danger, he takes a short sleep standing, if he sleep at all. he thus sleeps, it is most probable that his tusks furnish him a support; and that, placing them against a tree, he relieves the weight which his head carries, and enjoys a partial repose with tolerable ease. An example of this was given by the elephant of Louis XIV. For the last five years of his life he did not lie down till he was sick; and "he em-

Williamson.

ployed his tusks in making two cavities in the two faces of a stone buttress which projected from the wall of his cell, and these cavities served him for a support when he slept, his tusks being fixed in them."*

The tusks of the elephant correspond with the canine teeth in other quadrupeds. It was an old opinion, which has been often refuted, that the tusks. of elephants are horns. Although the substance of which they are composed, called ivory, is certainly different from the bone of other teeth, it is formed, like other teeth, by successive secretions from a pulpy root (noyau). The tusk has no adhesion to this root, but is held in its alveole (socket) as a nail is held in a plank, by the elasticity of the parts alone. The external direction of the tusk may be somewhat changed, by accident or design, for this reason. The ivory is formed from within, by depositions of very thin laminæ; so that the outer surface will continue to bear any mark which Instances have repeatedly ocis scratched on it. curred of musket-balls having been found imbedded in the tusk of an elephant, without any visible ex. ternal aperture: and this curious circumstance has given rise to some controversy among anatomists. Some have thought that the aperture was filled up by the organic force of the tusk; but it is likely that in many cases the foreign substance did not enter at the place where it was found. We have. however, a piece of ivory lying before us, in the solid substance of which a wrought-iron musket ball is imbedded, about an inch from the surface; and the place where the ball entered is distinctly

^{*} Perrault, Mémoires, vol. ii., p. 512.

seen, the aperture being, indeed, filled up by a new deposition, but having the appearance of a knot in This piece of ivory was cut in Mr. Haw. kins's pianoforte manufactory in 1805, and was lent to us by that gentleman. There are similar specimens in the Museum of the London University. A ball or other hard substance may penetrate the tusk at the hollow part, and descend into the solid. in a manner which is thus clearly explained: "If a ball penetrate the side of a tusk, cross the cavity, and lodge in the slightest way on the opposite side, it will become covered towards the cavity by the newly deposited layers of ivory, while no opening will exist between it and the surface to account for its entrance. If it have only sufficient force to enter, it will probably sink, by its own weight, between the pulp and tooth, until it rests at the bottom of the cavity. It there becomes surrounded by new layers of ivory; and as the tusk is gradually worn away and supplied by new depositions, it will soon be found in the centre of the solid part of the tooth. Lastly, a foreign body may enter the tusk from above, as the plate of bone which forms its socket is thin; and if this descends to the lower part of the cavity, it may become imbedded by the subsequent formations of ivory. This must have happened in a case where a spearhead was found in an elephant's tooth. The long axis of the foreign body corresponded to that of the cavity. No opening for its admission could be discovered; and it is very clear that no human strength could drive such a body through the side of a tusk."* In the

^{*} Phil. Trans. 1801; quoted in Lawrence's and Coulson's translation of Blumenbach.

section of the elephant's head at p. 52, e exhibits the alveole of the tusk, and f its cavity opened, to show the space which the pulp occupies.

The elephant has milk-tusks, which he sheds between the first and second year, when not two inches in length. In a month or two after this process, the permanent tusks cut the gum. second tusks remain during the life of the animal; they are never again shed. The tusks of the Indian female are very small in comparison with those of the male; but they are used as weapons of defence against other elephants. The tusks of the male vary in size, according to the species and the age of the animal. Those of the Indian elephant of Bengal rarely exceed seventy pounds each in weight, though tusks have been brought to the India House weighing one hundred and fifty pounds each. Bernier saw two remarkable tusks in India. each of which was too heavy for a man to lift. Cuvier is of opinion that our knowledge of the African elephant, limited as it is, warrants us in concluding that the females of that species have large tusks, and that the disproportion of their size in the two sexes is far less than in the Indian species. This opinion, however, is not borne out by travel-Mr. Burchell ascribes the want of success of some elephant-hunters whom he met with, to the circumstance of their having only encountered females with small tusks. Cuvier has published a table of the length, diameter, and weight of the largest tusks, whether of the Indian or African species, of which any account has been given. largest on record was one sold at Amsterdam, according to Klokner, which weighed three hundred

and fifty pounds. Several tusks, measured by Eden. were nine feet in length; and one described by Hartenfels, in his Elephantographia, exceeded fourteen feet. The largest in the Museum of Natural History at Paris is nearly seven feet in length, and about five inches and a half in diameter at the large As the tusks grow throughout the life of the animal, and the rest of the body does not, they offer no certain standard by which we can estimate the size of the elephant to which they have belonged. Nor can we establish any proportion between their diameter and their length, as they are liable to be worn at the points, according to the use which the animal makes of them. There is no relation. either, between their weight and their dimensions, as the cavity at the base is more or less filled in particular individuals of the same species. The curvature of the tusks is also subject to great vari-Some of the Indian elephants, with large teeth, called Dauntelah, have their tusks varying from a projecting horizontal, but rather elevated curve, to a form almost straight. Those elephants which are called Mooknah, have their tusks pointing directly downward. Several tusks are preserved in European cabinets of the most remarkable form; some being spiral, and others, which are more common, in the shape of an italic S. It is probable, in the present day, when herds of elephants are scarce, as compared with times of less advanced civilization, and when those which are found are hunted for their ivory without remorse, that few elephants live the natural term of their life; and that the tusks, therefore, which come to Europe, are of smaller size than those possessed by

the ancients. We shall examine this point in a subsequent chapter on the use of ivory by the ancients in architecture and sculpture.

The construction of the elephant's grinding teeth is one of the most striking examples of the adapta. tion of the teeth of every animal to its peculiar mode of subsistence. It is evident, that as the elephant has not a ruminating stomach, and yet requires vast quantities of vegetable food for his support, the instruments by which he masticates his food should be either more durable than in other herbivorous animals, or should be renewed when their grinding surfaces are worn away. The duration of the teeth of all quadrupeds is in proportion to their ordinary term of existence. In man. whose artificial modes of life may induce a quicker decay of the teeth, but who can supply the deficiency by the art which teaches him to prepare his food so as to suit his powers of mastication, the complete loss of teeth does not necessarily indicate a termination of life. But to an animal that feeds upon grass and other indigestible vegetable substances, the destruction of the teeth involves a speedy death: and therefore, in most cases, the decay of the teeth is simultaneous with a general decay. "The teeth of the deer and sheep are worn down in a much less time than fifteen years; those of horned cattle in twenty years; those of the horse in forty or fifty years; while those of the elephant last a century; if the animal were to grow to double its present size, there is a provision for the continuance of the teeth: but as soon as the growth of the jaw is stopped, the succession of the teeth is arrested also. which fixes the duration of the animal's life."*

* Home's Comp. Anat., vol. i., p. 215.

The provision which Nature has made for enabling the elephant to masticate not only a larger quantity of food than other animals, but through a much greater series of years—to wear his teeth more, and to wear them longer—is by securing their renewal when they are worn out.

To describe the peculiar manner in which this remarkable operation is effected, would lead us into a description of the mode in which teeth generally are formed. To the anatomical student this branch of his science is singularly interesting; and on the subject of the elephant's teeth, he may find the most complete and satisfactory dissertations in Cuvier's admirable article, "Sur les machelières des élephans"*—on the teeth of the elephant—and in Sir Everard Home's Lecture on the Complex Teeth.† For popular information, we transcribe a passage of a very well-written paper on elephants, which had the advantage of Mr. Corse's revision, in Dr. Brewster's Edinburgh Encyclopædia:

"The elephant has no cutting teeth in either jaw in front; but he is furnished with most powerful grinders, that enable him to bruise the vegetables on which he feeds. These teeth, as in all herbivorous animals, have an uneven surface, but do not rise into points as in animals which feed on flesh. Each grinder is composed of a number of perpendicular laminæ, which may be considered as so many teeth, each covered with a strong enamel, and joined to one another by a bony substance of the same quality as ivory. This last substance, being much softer than the enamel, wears away faster by the mastication of the food, so that the enamel

^{*} Ann. du Mus., tom. viii., p. 93. † Comp. Anat., i., 202.

remains considerably higher; and, in this manner, the surface of each grinder acquires a ribbed appearance, as if originally formed with ridges. From very accurate observations which have been made on the Asiatic elephant, it appears that the first set of grinders, or milk teeth, begin to cut the jaw eight or ten days after birth, and the grinders of the upper jaw appear before those of the lower one. These milk grinders are not shed, but are gradually worn away during the time the second set are coming forward, and, as soon as the body of the grinder is nearly worn away, the fangs begin to be absorbed. From the end of the second to the beginning of the sixth year, the third set come gradually forward as the jaw lengthens, not only to fill up this additional space, but also to supply the place of the second set, which are, during the same period, gradually worn away, and have their fangs absorbed. From the beginning of the sixth to the end of the ninth year, the fourth set of grinders come forward, to supply the gradual waste of the third set. In this manner, to the end of life, the elephant obtains a set of new teeth as the old ones become unfit for the mastication of his food.

"The milk grinders consist each of four teeth or laminæ; the second set of grinders of eight or nine laminæ; the third set of twelve or thirteen; the fourth set of fifteen, and so on to the seventh or eighth set, when each grinder consists of twenty-two or twenty-three; and it may be added, that each succeeding grinder takes at least a year more than its predecessor to be completed."

In the cut at page 52 (section of the Elephant's scull), h shows the anterior tooth reduced almost to

nothing by detrition, and by the compression of the succeeding tooth and its own alveole. i shows the tooth in activity, the roots of which begin to form at k; the triturating part is already used on its face, l. The posterior laminæ are yet untouched. n is the germe of the back tooth, still enclosed in its membranous cover (capsule), and lodged in a cavity of the back jaw.*

We have already mentioned an instance of the ferocity of the elephant under a peculiar state of excitement, as observed by Mr. Corse. This state is indicated in both sexes, and is probably in some degree relieved, by the secretion of a brownish juice from a considerable gland at the temple, through an opening in the skin. This aperture is situated between the ear and the eye, on each side of the head, and the gland is immediately under the skin, on each side also. The glands are as much as six inches in diameter, but the aperture is scarcely perceptible. This peculiarity is noticed by Strabo; and the Indian mythology has seized upon the circumstance as the foundation for one of its fanciful devices: "The Hindoo poets frequently allude to the fragrant juice which oozes, at certain seasons, from small ducts in the temples of the male elephant, and is useful in relieving him from the redundant moisture with which he is then oppressed, and they even describe the bees as allured by the scent, and mistaking it for that of the sweetest flowers. When Crishna visited Sanc'hadwip, and had destroyed the demon who infested that delightful country, he passed along the bank

^{*} For a more minute representation of these parts, see Annales du Muséum, tom. vii., pl. 41.



of a river, and was charmed with a delicious odour which its waters diffused in their course. He was eager to view the source of so fragrant a stream. but was informed by the natives that it flowed from the temples of an elephant, immensely large, milkwhite, and beautifully formed; that he governed a numerous race of elephants; and the odoriferous fluid which exuded from his temples had formed the river."* This fable was probably one of the many modes in which Hindooism reverenced the reproductive power of Nature. A singular circumstance is mentioned by Mr. Cowper Rose, that the natives of Africa often find a piece of wood in the elephant's head, to which they attach great value as a charm. Mr. Rose does not seem to have been acquainted with the uses of the gland just described, but his narrative explains the manner in which the wood enters the head, for enter it must. "I sat on one (a dead elephant) while they searched for the wood in his head. It lies about an inch beneath the skin, imbedded in fat, just above the eye, and has the appearance of a thorn, or a small piece of twig broken off. Some are without it: and, on examining the spot minutely, we found that there was a small opening in the skin; a large pore it may be; and I conceive that this phenomenon is simply accounted for by the twig breaking in this hole when the animal is in the act of rubbing his head against the bushes."†

The skin of the existing species of elephant has very little hair upon it; a fossil specimen has been found in which the hair was very thick. The ex-

^{*} Wilford, in Asiatic Researches, vol. iii. † Four Years in Southern Africa, p. 236.

isting species are evidently adapted to live in hot climates; for, with the exception of a few hairs on the legs and on the crown of the head, the animal has no covering over his skin to protect him from The same deficiency makes him very sensible to heat, and particularly careful to defend himself from the annoyances of insects. The skin is generally smooth and soft, and becomes hard and knotty from disease, produced, probably, by an uncongenial temperature. Mr. P. Blair, in the account of his dissection of the Dundee elephant. says, "the cuticula was covered all over with a strange sort of scab, like short pieces of whalebone, much divided, but adhering fast: they were from one sixteenth to one sixth of an inch in length. I take them to be a distemper from the coldness of the climate."* The inconvenience of this want of hair in hot climates is lessened by the disposition of the animal to bathe. Bishop Heber has described this habit of the elephant, as he observed the enjoyment of a number upon his approach to Dacca: "At the distance of about half a mile from these desolate palaces, a sound struck my ear as if from the water itself on which we were riding, the most solemn and singular I can conceive. was long, loud, deep, and tremulous, something between the bellowing of a bull and the blowing of a whale, or, perhaps, most like those roaring buoys which are placed at the mouths of some English harbours, in which the winds make a noise, to warn ships off them. 'Oh,' said Abdallah, 'there are elephants bathing; Dacca much place for elephant. I looked immediately, and saw about twenty of

* Phil. Trans. H 2 these fine animals, with their heads and trunks just appearing above the water. Their bellowing it was which I had heard, and which the water conveved to us with a finer effect than if we had been on shore."* The elephant also possesses the power of ejecting from his trunk water and dust, and his own saliva, over every part of his body. "Nature has provided the elephant with means to cool its heated surface, by enabling it to draw from its throat, by the aid of its trunk, a copious supply of saliva, which the animal spirts with force very frequently all over its skin. It also grubs up dust, and blows it over its back and sides, to keep off the flies; and may often be seen fanning itself with a large bough, which it uses with great ease and dexterity."+ Mr. Southey has described this habit of the elephant, in a natural state, in a passage of great beauty:

"Trampling his path through wood and brake,
And canes which crackling fall before his way,
And tassel-grass, whose silvery feathers play
O'ertopping the young trees,
On comes the elephant, to slake
His thirst, at noon, in yon pellucid springs.
Lo! from his trunk upturn'd, aloft he flings
The grateful shower: and now
Plucking the broad-leav'd bough
Of yonder plume, with waving motion slow,
Fanning the languid air,
He waves it to and fro."

As our knowledge of the growth of the elephant has been acquired from those which have either been bred or born in captivity, we shall reserve this portion of our subject for the next chapter.

^{*} Journal, vol. i., p. 182.

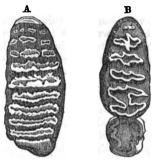
[†] Oriental Sports.

[†] Curse of Kehama, xiii.

The ancients, according to Philostratus, were inclined to think that the elephant lived more than four hundred years. They founded this belief apon the authority of a story of one with a particular mark having been captured by Juba. king of Lydia, four hundred years after a battle, in which the animal had fled to Mount Atlas. This is not grounded upon a sufficiently accurate chronology to command our belief. Tavernier appears to have had tolerable evidence, from the accounts of the keepers of elephants in India, that particular individuals had been in captivity from one hundred to one hundred and thirty years. The elephant is, doubtless, a very long-lived animal; and the provision for the renewal of its teeth shows that the Author of Nature intended that his abode upon this earth should be, in comparison with other quadrupeds, and even with man, a prolonged existence. Pliny, upon the authority of Aristotle, states that the elephant lived about two or three hundred years; and the Romans, in the time of Gordian, in the spirit of poetical exaggeration, chose an elephant for the symbol of eternity.

We are principally indebted to the accurate researches of Cuvier for the determination of the specific differences of the Indian and the African elephant. Neither Buffon nor Linnæus conceived that there was more than one species; and, until the time of Camper, the remarkable distinction in the structure of the teeth of the two species was entirely tmobserved.

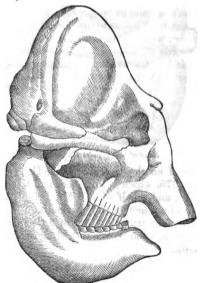
This distinction, to which, in all cases, naturalists properly attach great importance, may be observed in the germes of the molar teeth; and from the peculiar conformation of these germes, when the tooth has been used, its surface presents, in the Indian species, a series of narrow transverse ribands of an equal size, whose edges are, as it were, scolloped; while in the African species the ribands assume a lozenge form; that is, they are larger in the middle than at the ends, and the edges are rarely scolloped. The laminæ being larger in the African species than in the Indian, a smaller number are required to form a tooth; nine or ten uniting to complete a tooth of the one species as large as one composed of thirteen or fourteen laminæ in the other.



· Cheek teeth : A, of the Indian species; B, of the African.

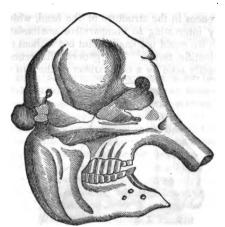
But the distinctions of the two species are evident enough without an examination of the molar teeth. Cuvier first pointed out, in 1795, the distinctive characters of their heads. In the Indian species the summit of the head forms a sort of pyramid; in the African it is almost round. The front of the head in the Indian species is concave; in the African it is somewhat convex. There are many other

differences in the structure of the head, which are highly interesting to comparative anatomists, but which we could not easily point out without the use of scientific terms. The general differences will be readily seen by a comparison of the two sculls.



Scull of the Indian Elephant.

The most striking difference of each species is, however, exhibited in the dimensions of the ears. In the Indian elephant the ear is of a moderate size; in the African it is enormous, and covers the shoulder. In the cabinet of the King of Denmark there



Scull of an African Elephant.

is the ear of an elephant, shot at the Cape of Good Hope in 1675, which is three feet and a half long, by two feet and a half wide. Mr. Pringle informs us that it is not uncommon in Southern Africa to see the natives using the ear of an elephant as a sort of truck, upon which they drag manure and other loads.

CHAPTER IV.

THE INDIAN ELEPHANT.—FEUITFULNESS IN A STATE
OF CONFINEMENT.—GROWTH.—MODES OF TAKING
WILD ELEPHANTS IN ASIA.

WE have already noticed the assertions of Ælian. that elephants were bred at Rome; and Columella. a writer on rural affairs, distinctly says, "within our own walls (Rome) we have seen elephants born." In India it was thought unlucky to allow tame elephants to breed; but the Emperor Akbar overcame this scruple. The custom, however, evidently went into disuse; for Tavernier and other Oriental travellers were not only ignorant of the fact, but expressly asserted that the circumstance never took place. Upon this inaccurate information many writers on natural history founded a theory that the proud elephant refused to multiply slaves for the use of man. The experiments of Mr. Corse have. however, completely set this question at rest; and though it is probable, as long as elephants are sufficiently numerous to be taken in herds, that the greater expense of breeding them will discourage any attempts to continue the species under the direction of man, there is no doubt, if it were desirable, that the elephant might be improved in size, strength, and activity, exactly in the same manner that the horse of England has been rendered so superior in power and swiftness to the horse in a state of na. ture, by a judicious intermixture of various races.

The ordinary period of gestation in the elephant is twenty months and eighteen days. This point has been established by the observations of Mr. Corse. The young elephant at its birth is about thirty-five inches high. In the first year he grows about eleven inches; in the second, eight; in the third, six; in the fourth, five; in the fifth, five; in the sixth, three and a half; and in the seventh, two and a half. Mr. Corse thinks that elephants attain their full size between eighteen and twenty-four years of age; though other writers, reasoning from the duration of life, believe that the animal continues to increase in size, when in a state of nature, for nearly double that period.

Mr. Ranking, who was resident many years in Hindostan, "saw an elephant in Bengal when it was only eighteen hours old. It was about thirtythree inches high, weak and tottering, but very playful, twisting in its proboscis a few blades of large grass."* That the young elephant sucks with its mouth is now distinctly ascertained. It is somewhat a humiliating reflection for the pride of human knowledge, which grasps at so many things beyond the limits of reason, and is lamentably ignorant of some of the commonest circumstances that happen on the earth, that a point apparently so simple should long have remained in doubt; and that several of the most deservedly popular writers should have maintained that the young of the elephant did. in this particular, exactly what it does not, and were ready to establish their position by the most incontrovertible theories. The pertinacity of those who speculate on events without evidence, and who

^{*} Wars and Sports of the Mongols, &c., p. 444.

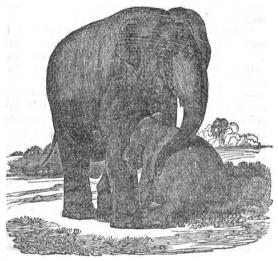
support their speculations even against the most distinct evidence, is curiously exemplified in M. Houel's account of the habits of the elephant; for he refuses to believe M. le Vaillant's narrative of his own observation of the young elephant sucking with his mouth, because Perrault and Buffon had asserted the contrary, upon the soundest analogies! Mr. Corse's account of the actual process is the

most precise we have met with.

"The young of the elephant, at least all those I have seen, begin to nibble and suck the breast soon after birth, pressing it with the trunk, which by natural instinct they know will make the milk flow more readily into the mouth while sucking. phants never lie down to give their young ones suck; and it often happens, when the dam is tall, that she is obliged for some time to bend her body towards her young, to enable him to reach the nipple with his mouth: consequently, if ever the trunk was used to lay hold of the nipple, it would be at this period, when he is making laborious efforts to reach it with his mouth, but which he could always easily do with his trunk, if it answered the purpose. In sucking, the young elephant always grasps the nipple, which projects horizontallly from the breast, with the side of his mouth. I have very often observed this; and so sensible are the attendants of it, that with them it is a common practice to raise a small mound of earth, about six or eight inches high, for the young one to stand on, and thus save the mother the trouble of bending her body every time she gives suck, which she cannot readily do when tied to her picket."* M. Foucher d'Obsonville, who had also ob-

^{*} Phil. Trans. 1799.

served the young elephant playing with the teat of the mother with his trunk, attributes the prevalent error to this circumstance. Mr. Williamson says, that the position of the two breasts of the female enables the young one (technically called a calf) to suck as it runs along by the side of the mother, or even under her belly.*



The affection of the female elephant for her young has been denied by some writers. Mr. Williamson, however, gives an anecdote which contradicts this opinion. He says, "a female elephant will trust her young with great confidence among the Oriental Field Sports, p. 43.

Luman species, but is very jealous of all brutes. however, they suspect any trick, or perceive any danger, they become ungovernable. I recollect being one of many who were seated at the top of a flight of stone steps at the entrance into the Great House at Secrole, and had enticed the calf of a very fine, good-tempered elephant feeding below to ascend towards us. When she had nearly got up the steps her foot slipped, and she was in danger of falling; which being perceived by the mother, she darted to save the rambler, sending forth a most terrific roar, and with such a significant eye as made us all tremble. She guided the descent of her little one with wonderful caution, none of us feeling the least disposition to offer any aid on the occasion."* Captain Knox, who was detained for twenty years a captive in Ceylon, says, " As the Chingalays report, they bear the greatest love to their young of all irrational creatures; for the shes are alike tender of any one's young ones as of their own. Where there are many she-elephants togeth. er, the young ones go and suck of any, as well as of their mothers; and if a young one be in distress, and should cry out, they will all, in general, run to the help and aid thereof; and if they be going over a river, as here be some somewhat broad, and the streams run very swift, they will all with their trunks assist and help to convey the young ones over."

The calf of the elephant, like the young of every animal, follows its mother with great perseverance; although he is ready enough to frisk about in his rude way, and especially to play with children, a.

^{*} Oriental Field Sports, p. 43.

[†] Historical Relation of Ceylon, chap. vi.

if he had the lightness of a kid. These sports may remind us of the assembly of "all beasts of the earth" before our common parents in Eden, when

"Th' unwieldy elephant
To make them mirth used all his might."*

Mr. Williamson says, "the calves are extremely playful, but possess great strength, rendering their gambols rather dangerous;" and Tavernier has an agreeable passage describing their mode of play. "When merchants bring elephants to any place for sale, 'tis a pleasant sight to see them go along. There are old and young together, and when the old are gone by, the children run after the little ones, and leap upon their backs, giving them something to eat; but perceiving their dams are gone forward, they throw the children off, without hurting them, and double their pace."

The young elephants which are reared in the Indian settlements are principally produced by the females that are taken wild at the time they are in calf. It does not appear that there is any difficulty in the education of these little ones, who are accustomed to a domestic state from their birth; but that they are gradually accustomed to bear burdens, and to become obedient to the commands of their keepers. In the kingdom of Ava, where the female elephants belonging to the king are in a state of half wildness, there is considerable trouble in reducing the young ones to submission. Mr. Crawfurd, who was the British envoy to the court of Ava in 1827, has given an account of this curious operation.

* Paradise Lost, book iv.

[†] Tavernier's Travels, part ii., book 1.

"The young male elephants are weaned at three years old; that is to say, they are then separated from their dams, and broken in; a process which appears to be nearly as tedious and difficult as that of breaking in a full-grown elephant taken in the forest. A singular ceremony was performed before this process commenced, which deserves mention: It consisted of an invocation to the Nat Udinmain-so, the genius of elephant hunting. Between the walls of the town and an artificial mount, planted with trees, and raised upon a ledge of rocks, jetting into the Irawadi, there is a small elephant paddock, consisting of a single square palisade having no gates. The king sat under a little pavilion on the side of the mount, and directed in person the ceremony to which I allude. A banana-tree had been planted in the middle of the paddock, which was removed with great ceremony; and on the spot where it stood, five elderly persons came forward, with a solemn strut and dance, holding in their hands branches of a species of eugenia or jambu, and carrying offerings of rice and sweetmeats to the Nat. I could not learn the exect words of the incantation; but the substance of it was, that the demi-god was informed that a glorious prince, the descendant of great kings, presided at the present geremony; that he, the demi-god. therefore, was requested to be propitious to it, to get the elephants quietly into the pen, and generally to lend his aid throughout the whole ceremony. About two-and-thirty female elephants, with their young included, were now driven into the enclosure: they were shortly followed by four male elephants, the riders of which had long ropes, with a noose at the

end, in their hands. After many unsuccessful ef. forts, they succeeded at last in entangling the young elephant that was to be weaned, by the hind leg. This was a matter of great difficulty, for he was protected by the adroitness of the herd of female elephants which crowded round him for the purpose. When taken, he was a great deal more outrageous and obstreperous than the wild elephant caught yesterday. The large mounted elephants had to beat him frequently; and I observed, one or twice, that they raised him quite off the ground with their tusks, without doing him any material injury. The cry which he emitted on these occasions differed in no way but in degree from the squeak of a hog that is in pain or fear. He was ultimately confined in a small pen beyond one of the doors of the paddock, where two of the male elephants continued to watch him. He was still very outrageous, and making violent efforts to extricate himself, but all to little purpose."*

The various modes of capturing wild elephants in India have undergone little variation for several centuries; and they are, more or less, practised in all parts of Asia where elephants are still required to maintain the splendour of Oriental luxury, to assist in the pomp and administer to the pride of despotic monarchs, to bear the heavy equipage of an Indian camp, or to labour in the peaceful occupations of transporting those articles of commerce which are far too weighty to be moved by the power of the horse or the camel.

As civilization has advanced in India, the supply of wild elephants has necessarily diminished. In

^{*} Crawfurd's Embassy to Ava, p. 304.

the time of Baber the herds were described as inhabiting "the district of Kalpi; and the higher you advance from thence towards the East, the more do the wild elephants increase in number. the tract in which the elephant is chiefly taken. There may be thirty or forty villages in Karrah and Manikpur that are occupied solely in this employment of taking elephants." The learned translators of these memoirs, Dr. Leyden and Mr. Erskine, say, in a note to this passage, "the improvement of Hindûstan since Baber's time must be prodigious. The wild elephant is now confined to the forests under Hemlaa, and to the Ghats of Malabar. A wild elephant near Karrah (Currah), Manikpûr, or Kalpi, is a thing, at the present day, totally unknown. May not their familiar existence in these countries, down to Baber's days, be considered as rather hostile to the accounts given of the superabundant population of Hindûstan in remote In another passage Baber says, "in the jungle round Cûhnar there are many elephants:" and the translators add, "no wild elephants are ever found now in that quarter, or nearer than the hills."+ As we have before stated, the herds of wild elephants must be chiefly sought for in a depopulated country. Marco Polo, speaking of the plain at the foot of the Yun-nan mountains, in China, says, "The journey" (to the city of Mien, towards the confines of India) "occupies fifteen days, through a country much depopulated, and forests abounding with elephants, rhinoceroses, and other wild beasts. where there is not the appearance of any habitation." Thus, in the early part of the Mogul sway

Memoirs of Baber, p. 315.
 Marco Polo's Travels, by Maraden, p. 447.

in India, when a dense population was collected round the courts of the native despots, while immense districts were almost exclusively possessed by the elephants, the numbers which were taken to be employed in war, or to swell the cumbrous pomp of such conquerors as Kublai Khan and Timour. were almost incredible. Purchas says, "William Clarke, which served the Mogul divers years in his wars, saith that he hath seen in one army twenty thousand elephants, whereof four thousand for war; the rest females for burdens, young, &c."* Captain Hawkins, who was at Agra in 1607, says that Jehangir had twelve thousand elephants. The Emperor Akbar daily gave presents of elephants. These accounts, however exaggerated they may seem, at least show that immense quantities of wild elephants must have been taken throughout India to maintain these enormous establishments. introduction of firearms into warfare has rendered the elephant useless to an army, except for transporting heavy burdens; and the subjection of the most powerful of the native princes to the British dominion has overthrown much of that magnificent display in which the elephant performed so stately a part. The change, however, was not sudden. nor is it complete. The empolyment of the elephant is gradually ceasing, as the Oriental dynasties one by one fall before European skill, and as the manners of their courts, retaining little of the show and less of the substance of power, have yielded to the simpler forms of European authority. But even as recently as 1794, the Nabob of Oude went upon a hunting expedition with a thousand ele-

* Pilgrimage, book v., chap. 13.

phants; and in our own days the glory of the Burman empire is as inseparably connected with the possession of the "white elephant," and its pomp as much displayed in elephant fights and elephant processions, as it was before the period when a handful of merchants established themselves upon the coasts of India, destined in little more than a century to overthrow the greater number of the native dynasties, by bringing the compact and everactive power of the highest civilization into conflict with the scattered and inert force of semi-barbarous tyrannies, unchanging because uninstructed, oppressed by their own weight, and feeble through their own disunion.

When we consider the enormous strength of the elephant, which enables him to break through all ordinary means of confinement, and, at the same time, regard not only his ability to resist any violent attack, but his sagacity to elude any common stratagem, it must be evident that the business of his capture must be a task requiring equal courage and activity-great skill and presence of mind in the individuals engaged in it-and, when conducted upon a large scale, a combination of human force such as is seldom used except in the more prodigal game of war. A description, therefore, of the various modes in which this powerful animal is subjected to man must necessarily embrace many interesting details connected with the economy of the quadruped; and at the same time exhibit many traits of ingenuity and perseverance, as remarkable as any which are shown by the human mind in other extraordinary situations.

Pliny, describing the manner of capturing ele-

phants in India, says, "The hunter mounts on an elephant already tamed; and when he meets with a wild one separated from the herd, he pursues it. and strikes it until it is so exhausted that he is able to leap from the one to the other, and thus to reduce the wild animal to obedience."* This process is as summary as that which the Roman naturalist also notices as the practice of the Troglodytes, whom Diodorus Siculus by an expressive epithet describes as warring against the elephants. These are said to suspend themselves on the branches of trees under which the wild herd passes, and, slipping down over the crupper of a particular animal, seize his tail with the one hand and hamstring him with the other. Although the elephant is destroyed by an experienced African marksman with much more precision than by this process of cutting his hams, he is certainly not reduced to obedience so quickly by the Indian hunters of the present day as by those whom Pliny has described as bringing him into captivity. But the operation, however slow, is at least effective; and the discipline does not require a constant repetition, as there is no doubt that the mere process of beating must have required, even if it could have been performed without danger. The various modes which are employed in India and the adjacent islands for keeping up the supply of elephants for domestic use, are much more complicated than the Roman naturalist appears to have thought necessary; and these modes are followed up by a steady application of mild coercion, which at length effectually converts the unwieldy force of the huge quadruped

^{*} Nat. Hist., lib. viii., cap. 8.

into a machine, nearly as precise and obedient as one of those many ingenious inventions of modera times which have so greatly dispensed with the ir-

regular movements of animal power.

The rudest mode of taking the elephant is by digging a pit in his native forests, which is covered over with loose boards and the boughs and grass upon which he feeds. This is mentioned as the custom of Cevlon a century ago; and the Sieur Brue describes this as the mode of taking the elephant, for his flesh, by the Africans of Senegal. Mr. Williamson states that in places where the natives find the elephants destructive neighbours, they dig a pit, covered with a slight platform of branches and grass, towards which the herd is seduced by a tame elephant, when the leading pursuer is precipitated into the trap, and the remainder retire in great alarm. This practice is evidently not very successful; and we apprehend that the instinctive caution of the elephant not to tread upon any insecure ground must render it unavailing, except when his natural prudence gives way to the more powerful impulses of terror or desire. "The mode of getting elephants out of pits," according to Mr. Williamson, "is somewhat curious, but extremely simple. The animal is for the most part retained until sufficiently tractable to be conducted forth: when large bundles of jungle-grass, tied up into sheaves, being thrown to him, he is gradually brought to the surface, at least to such an elevation as may enable him to step out." The elephant will do the same if he is swamped in boggy ground, thrusting the bundles of grass and straw into the yielding carth with his heavy feet, and placing them so

around him with his trunk that he at last obtains a firm footing. Pliny, who mentions the manner of taking elephants in pits, says, that the companions of the unfortunate animal who is thus captured will throw branches and masses of earth into the hole to assist his deliverance. This appears somewhat incredible; but we are enabled to confirm, by an anecdote which has been published by Mr. Pringle, the disposition of these animals to assist a suffering

companion:

"In the year 1821, during one of my excursions in the interior of the Cape Colony, I happened to spend a few days at the Moravian Missionary settlement of Enon, or White River. This place is cituated in a wild but beautiful valley, near the foot of the Zuurberg mountains, in the district of Uitenhage, and is surrounded on every side by extensive forests of evergreens, in which numerous herds of elephants still find food and shelter. From having been frequently hunted by the Boors and Hottentots, these animals are become so shy as scarcely ever to be seen during the day except among the most remote and inaccessible ravines and jungles: but in the night they frequently issue forth in large troops, and range in search of food through the inhabited farms in the White River Valley; and on such occasions they sometimes revenge the wrongs of their race upon the settlers who have taken possession of their ancient haunts, by pulling up fruittrees, treading down gardens and cornfields, break. ing their ploughs, wagons, and so forth. I do not mean, however, to affirm that the elephants really do all this mischief from feelings of revenge, or with the direct intention of annoying their human perse-

cutors. They pull up the trees, probably, because they want to browse on their soft roots, and they demolish the agricultural implements merely because they happen to be in their way. But what I am now about to state assuredly indicates no ordinary intelligence. A few days before my arrival at Enon, a troop of elephants came down one dark and rainy night, close to the outskirts of the The missionaries heard them bellowing and making an extraordinary noise for a long time at the upper end of their orchard; but knowing well how dangerous it is to encounter these powerful animals in the night, they kept close within their houses till daylight. Next morning, on their examining the spot where they had heard the elephants. they discovered the cause of all this nocturnal uproar. There was at this spot a ditch or trench. about four or five feet in width, and nearly fourteen feet in depth, which the industrious missionaries had recently cut through the bank of the river, on purpose to lead out the water to irrigate some part of their garden ground, and to drive a cornmill. Into this trench, which was still unfinished and without water, one of the elephants had evidently fallen, for the marks of his feet were distinctly visible at the bottom, as well as the impress of his huge body on its sides. How he had got into it was easy to conjecture; but how, being once in, he had ever contrived to get out again, was the marvel. his own unaided efforts it was obviously impossible for such an animal to have extricated himself. Could his comrades, then, have assisted him? There can be no question that they had; though by what means, unless by hauling him out with

their trunks, it would not be easy to conjecture. And in corroboration of this supposition, on examining the spot myself, I found the edges of this trench deeply indented with numerous vestiges, as if the other elephants had stationed themselves on either side, some of them kneeling and others on their feet, and had thus, by united efforts, and probably after many failures, hoisted their unlucky brother out of the pit."

However unfrequent may be such instances of intelligent compassion among elephants, it is undoubted that the sagacity of the animal enables him to perceive that he may escape from the perilous confinement of a deep pit if he is supplied with the means of raising his enormous body nearly to the surface of the ground. A very curious anecdote, which not only illustrates this instinctive knowledge, but exemplifies the general exercise of the mental power of the "half-reasoning" animal, is given in a recent work on zoology.*

"At the siege of Bhurtpore in the year 1805, an affair occurred between two elephants which displays at once the character and mental capability, the passions, cunning, and resources of these curious animals. The British army, with its countless host of followers and attendants, and thousands of cattle, had been for a long time before the city, when, on the approach of the hot season and of the dry bot winds, the supply of water in the neighbourhead of the camps necessary for the supply of so many beings began to fall; the ponds or tanks had dried up, and no more water was left than the impasses wells of the country would farnish. The

[&]quot; Guvier's Animal Eingdom, by Griffiths, vol. iii., p. 376.

multitude of men and cattle that were unceasingly at the wells, particularly the largest, occasioned no little struggle for the priority in procuring the supply for which each were there to seek, and the consequent confusion on the spot was frequently very considerable. On one occasion, two elephant drivers, each with his elephant, the one remarkably large and strong, and the other comparatively small and weak, were at the well together; the small elephant had been provided by his master with a bucket for the occasion, which he carried at the end of his proboscis; but the larger animal, being destitute of this necessary vessel, either spontaneously or by desire of his keeper, seized the bucket, and easily wrested it away from his less powerful fellow-servant: the latter was too sensible of his inferiority openly to resent the insult, though it is obvious that he felt it; but great squabbling and abuse ensued between the keepers. At length, the weaker animal, watching the opportunity when the other was standing with his side to the well, retired backward a few paces in a very quiet, unsuspicious manner, and then rushing forward with all his might, drove his head against the side of the other, and fairly pushed him into the well.

"It may easily be imagined that great inconvenience was immediately experienced, and serious apprehensions quickly followed, that the water in the well, on which the existence of so many seemed in a great measure to depend, would be spoiled, er, at least, injured by the unwieldy brute which was precipitated into it; and as the surface of the water was nearly twenty feet below the common level, there did not appear to be any means that

could be adopted to get the animal out by main force, at least without injuring him: there were many feet of water below the elephant, who floated with ease on its surface, and, experiencing considerable pleasure from his cool retreat, evinced but little inclination even to exert what means he

might possess in himself of escape.

"A vast number of fascines had been employed by the army in conducting the siege, and at length it occurred to the elephant keeper that a sufficient number of these (which may be compared to bundles of wood) might be lowered into the well to make a pile, which might be raised to the top, if the animal could be instructed as to the necessary means of laying them in regular succession under his feet. Permission having been obtained from the engineer officers to use the fascines, which were at the time put away in several piles of very considerable height, the keeper had to teach the elephant the lesson, which, by means of that extraordinary ascendency these men attain over the elephants, joined with the intellectual resources of the animal itself, he was soon enabled to do, and the elephant began quickly to place each fascine, as it was lowered to him, successively under him, until, in a little time, he was enabled to stand upon them: by this time, however, the cunning brute, enjoying the pleasure of his situation after the heat and partial privation of water to which he had been lately exposed (they are observed in their natural state to frequent rivers, and to swim very often), was unwilling to work any longer, and all the threats of his keeper could not induce him to place another fascine. The man then opposed cunning to cunning, and began to caress and praise the elephant, and what he could not effect by threats he was enabled to do by the repeated promise of plenty of rack. Incited by this, the animal again went to work, raised himself considerably higher, until, by a partial removal of the masonry round the top of the well, he was enabled to step out: the whole affair occupied about fourteen hours."

In Nepaul, and in the countries bordering on the northern frontiers of India, where the elephants are of a small size, they are often captured by the natives with a phaun or slip-knot. This practice has some analogy with the custom of taking horses with the lasso in the Pampas. The hunter, seated on a docile elephant, round whose body the cord is fastened, singles out one from the wild herd; and, cautiously approaching, throws his pliable rope in such a manner that it rests behind the ears and over the brows of the animal pursued. He instinctively curls up his trunk, making an effort to remove the rope; which, with great adroitness on the part of the hunter, is then passed forward over the neck. Another hunter next comes up, who repeats the process; and thus the creature is held by the two tame elephants, to whom the phauns are attached, till his strength is exhausted. It would appear quite impossible to take a large elephant in this manner; although, with those of a peculiarly small breed, the operation does not appear more difficult than that of securing the wild horse or the buffalo in the plains of South America.*

It is remarkable, that in every mode of capturing the wild elephant, man avails himself of the

^{*} See Williamson's Sports, p. 39.

docility of individuals of the same species which he has already subdued. Birds may be taught to assist in ensnaring other birds; but this is simply an effect of habit. The elephant, on the contrary, has an evident desire to join its master in subduing its own race; and in this treachery to its kind exercises so much ingenuity, courage, and perseverance, that we cannot find a parallel instance of complete subjection to the will of him to whom it was given to "have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth."

From some peculiar circumstances which have not been accurately explained, large male elephants are sometimes found apart from the herd. Sir Stamford Raffles says, speaking of the elephants that he met with in his journey through the southern presidencies to Passumah. "The natives fancy that there are two kinds of elephants, the gaja berkampong, those which always go in herds, and which are seldom mischievous, and the gaja salung. gal, or single elephants, which are much larger and ferocious, going about either singly or only two or three in company. It is probable the latter kind are only the full-grown males."* probably, in many cases, separate themselves from their companions in search of fresh pastures. But as they are sometimes found in a state of considerable irritation, doing much mischief wherever they pass, it has been thought that these have been driven away by the stronger males, and that they are suffering all the agonies of unavailing jealousy. Being the finest elephants, and, therefore, the best

^{*} Sir Stamford Raffles' Life and Correspondence, p. 315.

adapted for sale, the hunters soon mark them for their own. They follow them cautiously by day and by night, with two, and sometimes four trained females, called Koomkies. If it be dark, they can hear the animal striking his food, to clean it, against his fore-legs, and they then approach tolerably close; if light, they advance more cautious-The females gradually move towards him, apparently unconscious of his presence, grazing with great complacency, as if they were, like him, inhabitants of the wild forest. It is soon perceived by them whether he is likely to be entrapped by their arts. The drivers remain concealed at a lit. tle distance, while the koomkies press round the unhappy goondah or saun (for so this sort of elephant is called). If he suffer himself to be cajoled by his new companions, his capture is almost certain. The hunters cautiously creep under him, and, while he is thus amused, fasten his fore-legs with a strong It is said that the wily females will not only divert his attention from their mohouts, but absolutely assist them in fastening the cords. Mr. Howitt made a spirited drawing of this curious scene, from the descriptions of Captain Williamson.

The hind-legs of the captive being secured in a similar manner, the hunters leave him to himself, and retire to a short distance. In some cases he is fastened at once to a large tree, if the situation in which he is first entrapped allows this. But under other circumstances, in the first instance his legs are only tied together. When the females quit him he discovers his ignominious condition, and attempts to retreat to the covert of the forest. But he moves with difficulty, in consequence of the ropes which



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have been lashed round his limbs. There are long cables trailing behind him; and the mohouts, watching an opportunity, secure these to a tree of sufficient strength. He now becomes furious, throwing himself down, and thrusting his tusks into the earth. If he break the cables and escape into the forest, the hunters dare not pursue him; but if he is adequately bound, he soon becomes exhausted with his own rage. He is then left to the farther operation of hunger, till he is sufficiently subdued to be conducted, under the escort of his treacherous friends, to an appointed station, to which, after a few months' discipline, he becomes reconciled.*

In the kingdom of Ava all the elephants are caught by decoy females, though the process is somewhat different from that practised by the Koomkies of British India. Mr. Crawfurd informs us that the King of Ava "is possessed, in all, of about one thousand elephants, divided into two classes: those which are thoroughly broken in and tamed, consisting principally of males; and those that are employed as decoys, all females, and in a half-wild state." These decoys are generally kept in the neighbourhood of forests frequented by elephants; and when the herd is joined by a wild male, they are all driven into the capital, to a place called the elephant palace, "appropriated for exhibiting, for the king's diversion, the taming of the wild male elephant. This place is a square enclosure, surrounded everywhere by a double palisade, composed of immense beams of teak timber, each equal in diameter to the mainmast of a four-hundred-tun

^{*} See Williamson's sports; and Mr. Corse's paper in the Asiatic Transactions, vel. iii.



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ship. Between the palisades there is a stone wall, about fourteen feet high and twenty thick. On the top of this the spectators are seated to view the sport. . . . The enclosure has two entrances; the gates of which are composed of beams, which can be moved at the bottom by means of ropes." We shall extract Mr. Crawfurd's amusing description of the scene which took place in this enclosure:

"A cloud of dust announced the approach of the elephants, about twenty in number: these, with the exception of the captive, were all females, several of them with their young following them. A few of the best broken-in only were mounted. Partly by persuasion and partly by force, these were seen driving before them a small male elephant, not, as we were told, above thirteen years old: it required at least half an hour to induce him to enter the gate of the enclosure. A very docile female elephant led the way, conducted by her keeper; but the halftamed females were nearly as reluctant to enter as the wild male himself; they went five or six times half way in before they were finally entrapped; and, twice over, the male had run off to the distance of a quarter of a mile from the enclosure, but was again brought back by the females.

"The elephants having entered, we were requested to come to the king's presence, in which situation we should have a better view of the sport. We walked round accordingly by the southern and eastern angles of the enclosure, and seats were assigned to us in the same line with, and next to the princes; not only the most distinguished, but the most convenient situation. We made a bow, as before, and the sport went on. From the smallness of the

elephant, there was neither much danger nor amuse-The females were withdrawn from the ment in it. enclosure one by one; and then the elephant-catchers, who are a distinct race, went into the square unarmed, and provoked the wild elephant to pursue them, which he did with great fury. The keepers took shelter from his pursuit within the palisade, through the apertures of which he lashed his trunk in vain. The elephant keepers exhibited much boldness and agility; but, from what we saw, I should conceive that they ran very little risk. Accidents. however, sometimes occur. A few years ago, one of the hunters, when pursued by the elephant, tripped and fell; he was killed on the spot by the enraged animal. The king, who was present when this happened, immediately retired, the sight of blood not being fit for him to behold, either as a sovereign or a votary of Gautama.

*Some goats were put into the square, and these were pursued by the elephant in the same way as the keepers, and with as little effect. These animals eluded his pursuit with the utmost ease; and were so little concerned at his presence, that they soon began to quarrel among themselves. When the elephant was sufficiently tired, three huge tame male elephants were brought in to secure him, each mounted by his keeper, who had in his hand a rope with a noose, which one of them, after a second or third effort, succeeded in casting round the fore leg. The ainmal made comparatively very little resistance, appearing to be quite subdued by the presence of his three powerful antagonists, who, after the noose was fixed, drove him by main force into a pen at the south side of the enclosure, from which he

was afterward withdrawn, and tied to a post by a comparatively slender rope put round his neck, through his mouth, and round his tusks. We saw him in this situation, under a shed, as we were returning home, very restless and sullen. He was so closely tied to the post that he could scarcely move, and had no power to do any mischief. We were told by the keepers that the male elephants, when thus secured, refuse food for about five days. It takes six or seven months to tame them effectually, and occasionally as much as a whole year, for their dispositions are various."*

Knox's account of the mode of taking elephants in Ceylon presents a great similarity to Mr. Crawfurd's narrative of the practice in Ava. He says. "Though there be many in the woods, yet but few have teeth, and they males only. Unto these they drive some she elephants, which they bring with them for the purpose; which, when once the males have got a sight of, they will never leave, but follow them wheresoever they go; and the females are so used to it, that they will do whatsoever is wished, either by a word or a beck, their keepers bid them; and so they delude them along through towns and countries, through the streets of the city. even to the very gates of the king's palace; where sometimes they seize upon them by snares, and sometimes, by driving them into a kind of pound, they catch them."† But the present mode of catching elephants in Ceylon is upon a large scale, such as is practised in Bengal, and consists in driving whole herds of these animals into a vast enclosure. called in Hindostan a Keddah. In ancient times.

^{*} Embassy to Ava, p. 299. † Hist. Rel. of Ceylon, c. vi. L

according to Pliny, elephants were chased by horse. men into a narrow defile, of which one end was closed up, and here they were detained till they were subdued by hunger. The present practice of the East has been pursued with little variation for many centuries. Arrian gives a minute account of the mode of taking wild elephants in his own The natives, he says, dig a deep ditch round a large open space, into which the herd passes over a bridge. Their escape is then prevented by the removal of the bridge; they are here kept till they are sufficiently starved and exhausted, when they are captured by tame elephants.* Fourteen hundred years after, the Sultan Akbar, on his return to his capital (Agra) from the kingdom of Chandez in the Deccan, "upon the way, near the village of Sipiri, fell in with a great herd of wild elephants. He ordered his cavalry to surround them, and he drove them, with great difficulty, into a fold constructed for that purpose; one of the male elephants, of a prodigious size, finding himself confined, strode over the ditch, bore down the wall and the palisadoes before him, and made his way into the plain. Three trained elephants were sent after him: he stood to fight, and before they could overcome and take him, he afforded very great diversion to the king, who was remarkably fond of the boisterous contention of those enormous animals."+ The large elephant-hunts of modern times are systematically carried on by the government; and the whole operation is conducted upon a scale of splendour which leaves all other hunting, even that of the bear in Sweden, at an immeasurable distance.

^{*} Indian History, chap. xii.

[†] Dowe's Hindostan, vol. ii., p. 242-

The magnificent scene of a great elephant hunt, where many thousand people are assembled, to drive a herd of these superb animals for miles with the clang of drums and trumpets, and the din of fireworks and musketry, is depicted by Mr. Corse

with great felicity:*

"When a herd is discovered, about three hundred people are employed to surround it, who divide themselves into small parties, consisting generally of three men each, at the distance of twenty or thirty yards from each other, and form an irregular circle, in which the elephants are enclosed; each party lights a fire and clears a footpath to the station that is next him, by which a regular communication is soon formed through the whole circumference from one to the other. By this path re-enforcements can immediately be brought to any place where an alarm is given; and it is also necessary for the superintendents, who are always going round to see that the people are alert upon their posts. The first circle being thus formed, the remaining past of the day and night is spent in keeping watch by turns, or in cooking for themselves and companions. Early the next morning one man is detached from each station, to form another circle in that direction where they wish the elephants to advance. When it is finished, the people stationed nearest to the new circle put out their fires, and file off to the right and left, to form the advanced party; thus leaving an opening for the herd to advance through, and, by this movement, both the old and new circle are joined, and form an oblong. The people from behind now begin shout-

* Asiatic Transactions, vol. iii.

ing, and making a noise with their rattles, drums, &c., to cause the elephants to advance; and, as soon as they are got within the new circle, the people close up, take their proper stations, and pass the remaining part of the day and night as before. In the morning the same process is repeated, and in this manner the herd advances slowly in that direction where they find themselves least incommoded by the noise and clamour of the hunters, feeding, as they go along, upon branches of trees, &c. If they suspected any snare, they could easily break through the circle; but this inoffensive animal, going merely in quest of food, and not seeing any of the people who surround him, and who are concealed by the thick jungle, advances without suspicion, and appears only to avoid being pestered by their noise. As fire is the thing elephants seem most afraid of in their wild state, and seldom venture near it, the hunters always have a number of fires lighted, and particularly at night, to prevent the elephants coming too near, as well as to cook their victuals and to keep them warm. The sentinels supply these fires with fuel, especially green bamboos, which are generally at hand, and which, by the crackling and loud report they make, together with the noise of the watchmen, deter the elephants from coming near; so that the herd generally remains at a distance, near the centre of the circle. Should they at any time advance, the alarm is given, and all the people immediately make a noise and use their rattles, to make them keep at a greater distance. In this manner they are gradually brought to the keddah, or place where they are to be secured."

The keddah, towards which their course is thus directed, is an immense enclosure, sometimes circular and sometimes triangular, formed of huge upright and transverse beams, and terminating in a second or even a third enclosure, of smaller dimensions but similar strength. At Tipperah the keddah described by Mr. Corse consisted of three en-Whether there be two or three of these great pens, which the mightiest force of the elephant is unable to break down, the one in which the herd is last driven has a narrow outlet, allowing room for the passage of one elephant only at a The principal difficulty is to persuade the herd to enter their destined prison. palisade is concealed, and many precautions are taken to divest the entrance of any terrific appear. ance, the leader often hesitates; and the whole herd rush back upon their pursuers. If they disperse, the circles of men have again to be formed, and the tedious operation of driving them slowly onward is necessarily repeated. If the leader, however, enter the gateway, the whole herd implicitly follows. We continue Mr. Corse's description:

"Immediately when they are all passed the gateway, fires are lighted round the greatest part of the enclosure, and particularly at the entries, to prevent the elephants from returning. The hunters from without then make a terrible noise, by shouting, beating of drums, firing of blank cartridges, &c., to urge the herd on to the next enclosure. The elephants, finding themselves ensnared, scream and make a noise; but seeing no opening except the entrance to the next enclosure, and which they at first generally avoid, they return to the place through

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which they lately passed, thinking perhaps to escape, but now find it strongly barricaded; and as there is no ditch at this place, the hunters, to prevent their coming near and forcing their way, keep a line of fire constantly burning all along where the ditch is interrupted, and supply it with fuel from the top of the palisade, and the people from without make a noise, shouting and hallooing, to drive them Wherever they turn, they find themselves opposed by burning fires, or bundles of reeds and dried grass, which are thrust through the openings of the palisades, except towards the entrance of the second enclosure. After traversing the first enclosure, and finding no chance of escaping but through the gateway into the next enclosure, the leader enters, and the rest follow; the gate is instantly shut by people who are stationed on a small scaffold immediately above it, and strongly barricaded; fires are lighted, and the same discordant din made and continued, till the herd has passed through another gateway into the last enclosure, the gate of which is secured in the same manner as the The elephants being now completely former was. surrounded on all sides, and perceiving no outlet through which they can escape, appear desperate, and in their fury advance frequently to the ditch. in order to break down the palisades, inflating their trunks, screaming louder and shriller than any trumpet, sometimes grumbling like the hollow murmur of distant thunder, but wherever they make an attack they are opposed by lighted fires, and by the noise and triumphant shouts of the hunters. they must remain some time in this enclosure. care is always taken to have part of the ditch filled

with water, which is supplied by a small stream, either natural or conducted through an artificial channel from some neighbouring reservoir. The elephants have recourse to this water to quench their thirst after their fatigues, by sucking the water into their trunks, and then squirting it over every part of their bodies. While they remain in this enclosure they continue sulky, and seem to meditate their escape; but the hunters build huts around them close to the palisade, watchmen are placed, and every precaution used to prevent their break-

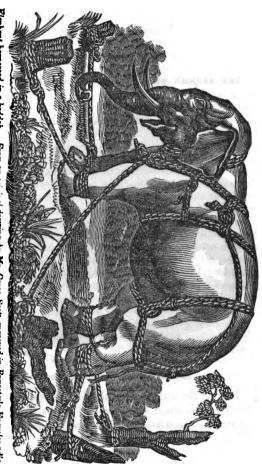
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"When the herd has continued a few days in the keddah, the door of the outlet is opened, into which some one of the elephants is entired to enter, by having food thrown first before, and then gradually farther on into the passage, till the elephant has advanced far enough to admit of the gates being shut. Above this wicker gate two men are stationed on a small scaffold, who throw down the food. the elephant has passed beyond the door, they give the signal to a man, who, from without, shuts it by pulling a string, and they secure it by throwing two bars that stood perpendicular on each side, the one across the other, thus x, and then two similar bars are thrown across each other behind the door next to the keddah, so that the door is in the centre. For farther security, horizontal bars are pushed across the outlet, through the openings of the palisades, both before and behind those crosses, to prevent the possibility of the doors being broken. outlet is so narrow that a large elephant cannot turn in it; but, as soon as he hears the noise that is made in shutting the gate, he retreats backward, and endeavours to force it; being now secured in the manner already noticed, his efforts are unavailing. Finding his retreat thus cut off, he advances and exerts his utmost force to break down the bars, which were previously put across a little farther on in the outlet, by running against them, screaming and roaring, and battering them like a ram, by repeated blows of his head, retreating and advancing with the utmost fury."*

In this confinement the elephant exhausts himself with fatigue. Strong ropes with nooses are spread about him; and, as soon as he puts a foot within the snare, he is bound to the palisade. When all his feet have thus been made fast, his hind legs are tied together; his body is then surrounded in various directions with powerful ropes, which are secured so as to form a complete harness. A couple of large cables with running nooses, are lastly put round his neck, and are tied to the ropes on each side. The preparations being complete, the cables are made fast to two tame elephants. heavy door at the end of the passage is opened, the ropes that tied his legs are loosened, and he is conducted by his powerful brothers to an open spot, where he is made fast, in a similar way, between two trees. When his subjugated brethren leave him, to conduct another to his place of captivity, his rage becomes fearful. He roars in an agony of despair; he tramples the food which is given him under his feet. He sometimes falls a victim to his paroxysm of fury; but more commonly the cravings of hunger induce him to eat, and he gradually yields to the power of gentle discipline.

. * Asiatic Transactions, vol. iii.

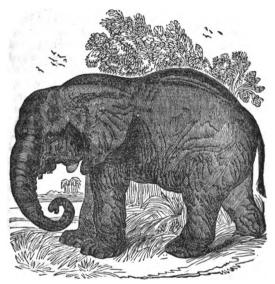




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CHAPTER V.

THE AFRICAN ELEPHANT. -ELEPHANT HUNTS.



African Elephant. Elephas Africanus. CUVIER.*

BEFORE the settlement of the Portuguese on the coasts of Africa, in the latter part of the fifteenth

 From an elephant in the Menagerie of the Jardin des Plantes 1829. century, the elephant ranged without much interruption on the banks of the great rivers, whose courses, even at our own days, have not been completely traced. In the plains of the kingdom of Congo, where the herbage attains a wild luxuriance amid innumerable lakes, and on the borders of the Senegal, whose waters run through extensive forests, herds of elephants had wandered for ages in security. The poor African, indeed, occasionally destroyed a few stragglers, to obtain a rare and luxurious feast of the more delicate parts of their flesh; and the desire for ornament, which prevails even in the rudest forms of savage life, rendered the chiefs of the native hordes anxious to possess the trunk of the elephant, to convert it into armlets and other fanciful embellishments of their persons. Superstition, too, occasionally prompted the destruction of this powerful animal; for the tail of the elephant had become an object of reverence, and therefore of distinction to its possessor: and the huntsman accordingly devoted himself, with as much ferocity as the hymna-dog that gnaws off the tail of the ox and the sheep during their unprotracted repose, to steal upon the unsuspecting elephant in his pasture, and to cut off his tail with a single stroke of his rugged hatchet. But these were irregular and partial incentives to the destruction of the most mighty, and, at the same time, the most peaceful inhabitant of the woods. The steady and inexorable demands of commerce had not yet come to the shores of Africa, to raise up enemies to him in all the tribes among whom he had so long lived in a state of comparative security. The trade in ivory had been suspended

for more than a thousand years. There were periods, indeed, in the history of the refined nations of antiquity, when this destruction of the elephant was as great as in modern times: when Africa vielded her tributes of elephants' teeth to the kings of Persia; when the people of Judæa built "ivory palaces;"† when the galleys of Tyre had "benches of ivory;"‡ when, contributing to the barbarous luxury of the early Grecian princes,

"The spoils of elephants the roofs inlay:"6

when the Etruscan attributes of royalty were sceptres and thrones of ivory; || when the ancient kings and magistrates of Rome sat in ivory seats: T when colossal ivory statues of their gods, far exceeding, in their vast proportions and their splendid ornaments, all the magnificence of the moderns, were raised by the Greeks of the age of Pericles; and when immense stores of ivory, to be employed with similar prodigality, were collected in the temples.** In the time of Pliny, the vast consumption of ivory for articles of luxury had compelled the Romans to seek for it in another hemisphere; Africa had ceased to furnish elephants' tusks, except of the smallest kind.†† A century or two earlier, according to Polybius, ivory was so plentiful in Africa, that the tribes on the confines of Ethiopia employed elephants' tusks as doorposts, and for the palisades that enclosed their fields. ## When the Roman power fell into decay, and the commerce of

^{*} Herodotus, Thalia. Elephant's teeth is the name in commerce for what are more accurately called defenses or tusks—the substance of ivory.

[†] Psalm xlv., 8. 6 Odyssey, lib. iv., v. 73. T Ibid., lib. v., cap. iv.

[‡] Ezek. xxvii., 6. Dio. Halicar., lib. iii., cap. 18. ** Cicero de Signis, par. 46. †† Hist Nat., lib. viii., cap. 2. ‡‡ See Plin., lib. viii., cap. 10.

Europe with Africa was nearly suspended for centuries, the elephant was again unmolested in those regions. He was no longer slaughtered to administer to the pomp of temples, or to provide ornaments for palaces. The ivory tablets of the citizens of ancient Rome (libri elephantini) had fallen into disuse; and the toys of modern France were constructed of less splendid materials.* gola, elephants' teeth had become so plentiful, because so useless as an article of trade, that in the beginning of the seventeenth century, according to Andrew Battell, an Englishman who served in the Portuguese armies, the natives "had their idols of wood in the midst of their town, fashioned like a negro, and at the foot thereof was a great heap of elephants' teeth, containing three or four tuns of them: these were piled in the earth, and upon them were set the sculls of dead men, which they had slain in the wars, in monument of their victory." The people of Angola and Congo, when the Portuguese first established themselves there, were found to have preserved an immense number of elephants' teeth for centuries, and had applied them to such superstitious uses. As long as any part of the stock remained, the vessels of Portugal carried large quantities to Europe; and this traffic formed one of the most profitable branches of the early trade with Africa. About the middle of the seventeenth century the store was exhausted. But the demand for ivory, which had been thus renewed in Europe after the lapse of so many centuries, of-

†Purchas, book vii., chap. 9.

^{*} Dieppe has been for several centuries the great manufactory of ivory ornaments.

fered too great a temptation to the poor African to be allowed by him to remain without a supply. The destruction of elephants for their teeth was again unremittingly pursued throughout those extensive forests; and that havoc has gone on with

little, if any, diminution, to our own day.

It would be exceedingly difficult to estimate with any pretension to accuracy the present consumption of ivory in Europe. Its use must have been considerably diminished, on the one hand, by the changes of taste, which have dispensed with the ivory beds and ivory chairs that adorned the palaces of princes in the age of Leo X.; and have displaced the inlaid tables and cabinets of a centu. ry later, by articles of furniture distinguished rather for the excellence of their workmanship than for the cost of their material. But, on the other hand, the increase of comforts and luxuriés among the middle classes of society, and the love of taste. ful ornament which has descended from the palace to the cottage (one satisfactory symptom of intellectual advancement), has probably increased the consumption of ivory in smaller articles. derstand that at Dieppe there are at present eleven flourishing manufactories of articles in ivory, from which various specimens of art, from the commonest piece of turnery to the most elaborate carving. are dispersed throughout the Continent. employed for crucifixes and other appendages of Roman Catholic worship. In England the demand for elephants' teeth, to be employed in the mainriac. ture of musical instruments, plates for miniatures. boxes, chessmen, billiard-balls, mathematical rules. and small pieces of carving, is much more consid. erable than might occur to a superficial observation. In 1827, the importation of ivory into England was 364,784 lbs. In eleven years, from 1788 to 1798, 18,914 cwt. of ivory was imported, which shows an average annual importation of 192,579 lbs.

The average weight of an elephant's tusk is about To have produced, therefore, 364,784 lbs. of ivory, the import of 1827, 6080 tusks must have been procured. This fact assumes the annual slaughter of at least 3040 elephants. But the real havoc is much greater. Mr. Burchell, in his travels in Africa, met with some elephant-hunters who had shot twelve elephants, which, however, produced no more than two hundred pounds' weight of ivory, as all the animals excepting one happened to be females. If anything like the same ill-luck or want of skill attended all the African elephanthunters, upward of forty thousand of these animals would be annually slain to supply the demand of Great Britain alone for ivory bawbles. But this circumstance is, of course, an extraordinary one; and we only mention it to show the necessary waste of elephant life in the supply of our commercial wants.

There is a peculiarity in the commerce of elephants' teeth which forcibly arrests the imagination. Ivory is not an article of paramount necessity. The fine marbles would answer the purposes of statuary better, even if the ancient art of sculpture in ivory were restored; and the harder woods are quite as useful in the manufacture of furniture. It is required only for ornaments which are by no means suited to every taste; for modern Europeans have not a passion for ivory, as the Romans are said by M. de Caylus to have had. And yet the foreign demand for this article, of which we hear and see little, gives activity to whole tribes of Afri-

cans: makes elephant-hunting a trade; exposes man, as we shall presently show, to the most appalling dangers and the severest privations; and spreads terror among thousands of these unoffending animals, who appear to have a natural right, which they have enjoyed from the creation, to the immense savannas upon which they pasture. Pringle, whose description of a herd of elephants we have already given, speaking of the inclinations of his companions to attack this herd, which desire was suppressed by a feeling of the danger, says. "When I looked around on these noble and stately animals, feeding in quiet security in the depth of this secluded and picturesque valley, too peaceful to injure, too powerful to dread any other living creature. I felt that it would be almost a sort of sacrilege to attempt their destruction in sheer wantonness, merely to furnish sport to the great destroyer, man; and I was glad when it was unanimously agreed to leave them unmolested." These, however, are not the feelings of the Hottentot who shoots the "noble and stately" beast, nor of the boor who carries his teeth to the coast, nor of the factor who buys them. It is not to be expected. nor perhaps is it desirable, that they should so feel. In his relations to the inferior animals, man must every hour harden his heart. It is his duty to abstain from every wanton or cruel sacrifice; but the great economy of nature is, perhaps, as much carried on by the power and the will of man to destroy every creature that can conduce to his necessities, or even his most artificial wants, as the relations between the animal and the vegetable world are maintained by the constant interchange of destruc

tion that goes forward among the insect race; for every shrub attracts its peculiar enemy, and that enemy in his turn becomes a victim to one more adroit or more powerful than himself.

When Thunberg travelled in Caffraria in 1773, he saw an elephant-hunter, who told him he had shot twelve elephants in a day close to Cape Town. It would be now difficult to find a herd within many miles. Wild elephants, however, sometimes approach very near to the abodes of man. year 1700, an immense elephant quietly walked into the town of Mina, on the Gold Coast; and paid so little attention to the shots which were fired at him, that, having entered the Dutch garden, he began to pull up the cocoa-trees with the greatest complacency amid a shower of balls. The negroes thought he would bear anything, and one unhappy man laid hold of his tail. The elephant turned round in an instant, thrust his tusks through the negro's body, and trampled him to pieces, although he suffered the carcass to be taken away without offering any interruption. He fell at last, covered with wounds; but he did not utter a cry till his trunk was cut off, and then his roars were fearful. Such an appearance of an elephant in a populous neighbourhood is now very rare; and thus the supply of ivory is gradually growing scarcer, or, at least, there are greater difficulties presented to its collection. The unbounded influence of commercial wealth, in calling forth every energy, whether of civilized or uncivilized man, will, however, ensure the destruction of the elephant as long as his teeth are an object of desire; and such is the capriciousness of our artificial wants, that the more difficulty M 2

there may be in obtaining ivory, the more eagerly will it be coveted. The growing scarcity of elephants' teeth will probably solve the problem, whether elephants still inhabit the range of the Atlas Mountains as they did in the time of Pliny.

In those districts of Africa where the supply of animal food is precarious, the elephant is naturally an object of pursuit for his flesh. The negroes who hunt him for this purpose are ill-provided with arms or ammunition; and they therefore incite his fury towards one or more of their number, while the rest hamstring him. Major Denham saw a victim of this butchery. He says, "the whole of the next day, the road leading to the spot where he lay was like a fair, from the number who repaired thither for the sake of bringing off a part of the flesh, which is esteemed by all, and even eaten in secret by the first people about the sheikh: it looks coarse, but is better flavoured than any beef I found in the country."* Le Vaillant feasted on the foot of an elephant with extraordinary relish. a dish for a king," according to this enthusiastic traveller. "Never have our modern Luculluses," says he, "been able to produce on their table such a dish as that I have before me. In vain their gold reverses the order of the seasons; in vain they lay every country under contribution; their luxury has not reached this point; there are bounds to their sensual cupidity." The epicures of Rome, however, to whom inordinate expense was a matter of the utmost indifference, made a dish of the cartilage of the trunk of the elephant. Pliny says, "they fancied they were eating ivory."

^{*} Discoveries in Africa, p. 221.

The Abyssinians, according to Bruce, destroy the elephant for food. "They cut the whole of the flesh off his bones into thongs, like the reins of a bridle, and hang these like festoons upon the branches of trees, till they become perfectly dry, without salt; and then they lay them up for their provisions in the seasons of the rains." Sparmann saw the flesh dried in a somewhat similar manner, by the Hottentots of the Boshiesman race. Bruce has given a spirited narrative of an elephant-hunt, conducted by the Africans, who principally subsist on his flesh:

"An hour before day, after a hearty breakfast, we mounted on horseback, to the number of about But there was another body, both of horse and foot, which made hunting the elephant their particular business. These men dwell constantly in the woods, and know very little of the use of bread, living entirely upon the flesh of the beasts they kill, chiefly that of the elephant and rhinoce-They are exceedingly thin, light, and agile, both on horseback and foot; are very swarthy, though few of them are black; none of them woolly-headed, and all of them have European features. They are called Agageer, a name of their profession, not of their nation, which comes from the word agar, and signifies to hough or hamstring with a sharp weapon. More properly it means the cutting of the tendon of the heel, and is a characteristic of the manner in which they kill the elephant, which is shortly as follows:

"Two men, absolutely naked, without any rag or covering at all about them, get on horseback; this precaution is for fear of being laid hold of by the trees or bushes in making their escape from a very watchful enemy. One of these riders sits upon the back of the horse, sometimes with a saddle and sometimes without one, with only a switch or short stick in one hand, carefully managing the bridle with the other; behind him sits his companion, who has no other arms but a broadsword, such as is used by Sclavonians, and which is brought from Trieste. His left hand is employed grasping the sword by the handle; about fourteen inches of the blade is covered with whipcord. This part he takes in his right hand, without any danger of being hurt by it; and, though the edges of the lower part of the sword are as sharp as a razor, he carries it without a scabbard.

"As soon as the elephant is found feeding, the horseman rides before him as near his face as possible: or, if he flies, crosses him in all directions, crying out, 'I am such a man and such a man: this is my horse, that has such a name: I killed your father in such a place, and your grandfather in such another place; and I am now come to kill you; you are but an ass in comparison of them.' This nonsense he verily believes the elephant understands, who, chased and angry at hearing the noise immediately before him, seeks to seize him with his trunk or proboscis; and, intent upon this, follows the horse everywhere, turning and turning round with him, neglectful of making his escape by running straight forward, in which consists his only safety. After having made his turn once or twice in pursuit of the horse, the horseman rides close up alongside of him, and drops his companion just behind on the off side; and while he en-

gages the elephant's attention upon the horse, the footman behind gives him a drawn stroke just above the heel, or what in man is called the tendon of Achilles. This is the critical moment: the horseman immediately wheels round, takes his companion up behind him, and rides off full speed after the rest of the herd, if they have started more than one; and sometimes an expert agageer will kill three out of one herd. If the sword is good and the man not afraid, the tendon is commonly entirely separated; and if it is not cut through, it is generally so far divided, that the animal, with the stress he puts upon it, breaks the remaining part asunder. In either case, he remains incapable of advancing a step, till the horseman's return, or his companions coming up pierce him through with javelins and lances: he then falls to the ground. and expires with loss of blood.

"The agageer nearest me presently lamed his elephant and left him standing. Ayto Engedan, Ayto Confu, Guebra Marram, and several others, fixed their spears in the other before the agageer had cut his tendons. My agageer, however, having wounded the first elephant, failed in the pursuit of the second; and being close upon him at the entrance of the wood, he received a violent blow from the branch of a tree which the elephant had bent by his weight, and, after passing, allowed it to replace itself, when it knocked down both the riders, and very much hurt the horse. deed, is the great danger in elephant-hunting; for some of the trees, that are dry and short, break by the violent pressure of so immense a body moving so rapidly, and fall upon the pursuers or across

the road. But the greatest number of these trees being of a succulent quality, they bend without breaking, and return quickly to their former position, when they strike both horse and man so vio lently that they often beat them to pieces."

As we have before intimated, the destruction of the elephant for his flesh is almost nothing when compared with the havoc which is produced by the demand for ivory. We shall endeavour to collect from various travellers, more particularly from Mr. Cowper Rose, a brief account of the mode in which the pursuit of the elephant for his teeth is now conducted in Africa.

The elephant hunter, that is, the man who directs the operations of the Hottentots, is often a European. Mr. Rose shared the dangers of such a man, a native of England, who had been a smuggler; "a thin, spare, bony man, formed for activity," with "a sun-scorched countenance and an eye of habitual watchfulness." His hunting dress was a dark blue linen shirt: trousers of the same colour, supported by a waist-belt; a yellow silk handkerchief bound tightly round his head; his powder-horn and pouch hung on his side. two Hottentots who accompanied the hunter were equipped even in a more unpretending costume: trousers tucked up to the knee, showing bare legs that defied thorns; one shoulder-belt from which the pouch and powder-horn were suspended, and another supporting a hatchet for cutting out the tusks, and a bag for holding wild-honey. or four bold spirits thus compose a hunting-party. Each bears an immense gun, weighing at least twenty pounds. Their course is through the wild-

est countries, where no sound is heard by day but the monotonous toll of the campanero or bell-bird, and no more pleasing voice at night than the shriek of the jackal and the chattering of the hyæna. Footprints of the elephant begin to be traced; and the Hottentots, with unvarying accuracy, determine when the animal passed. "This is three days old," or, "This is last night." Several days are passed in these fatiguing marches under a burning sun. At length the hunter sees a troop of elephants on a distant hill, while the inexperienced European can discover nothing. Vaillant has described, with his usual spirit, the wonderful accuracy with which the Hottentot pursues the traces of the animal that he seeks: "What a subtile sense is the sight of a Hottentot! How he assists it by a difficult and truly wonderful attention! Upon a dry ground, where, in spite of his great weight, the elephant scarcely leaves any trace—in the midst of dead leaves, scattered and curled up by the wind—the African recognises his step. He sees the way which the animal has taken, and that which he himself must follow. A green leaf turned up or broken off, a bud or a little twig bruised or torn down-these and a thousand other circumstances are indications which never fail him. The most expert European hunter is completely baffled; for myself, I could never understand it."* curacy of observation at length brings the hunters close to the herd; and then the excitement and danger begin; fatigue is forgotten; the tempting ivory is within the grasp of the anxious adventurers. We shall describe the scene which follows in Mr. Rose's words:

* Vol i, p. 141.

"But now we went on with fresh vigour, and gained the hill opposite to that on which they were: we halted and watched; a few words passed between the hunter and Skipper (a Hottentot), and we descended silently the ravine that divided us. Again they whispered, marked from what point the light breeze came; and we commenced the steep ascent in a direction that the wind might come from the animals to us; for we were now so near them, that their quick scent would have discovered us. Skipper led, while we followed in Indian file, threading a narrow rocky path, which skirted one bank of a small hollow, while the huge beasts were feeding on the opposite one. The leader halted, the hunter gave my companion and myself lighted sticks, and whispered directions to fire the bush and grass, and to retreat in the event of the animals charging. It was a strange feeling to find myself within twenty yards of creature's whose forward movement would have been destruction; but they stood browsing on the bushes, and flapping their large ears, pictures of indolent security. We were taking our stations when we heard a shot, and then another, and of the eight elephants, seven fled. We went forward to see the effect of the shots. Skipper's had carried death with it; the elephant had fallen, but rose again. I never heard anything like its groans; he again fell, and we went up to him; the ball had entered behind the shoulder and reached the heart."

The troop of elephants flee, but their enemy quickly follows. Their course may be now easily traced, for they are terrified and angry. They uproot everything that impedes their path; branch-

es are strewed everywhere around, and the large euphorbias are broken like twigs. They at length stop. Their huge backs show above the bush. The hunters steal on-again fire-again an elephant dies—and again the herd rushes forward. Night comes on. The adventurers light a blazing fire, and sleep in safety, while the elephants and the buffaloes are around them. During the night one of the Hottentots may be heard reciting some tale of danger or superstition in a dull, monotoneus voice; and when the story of one is finished, another begins some similar narrative. At the dawn of day they are ready again to start. The pursuit continues, either till the remainder of the herd are destroyed or have escaped, or till the ammunition is exhausted. The party then retrace their ground, with their horses, to carry off the tusks, which they have marked as each animal is killed. There is no difficulty in finding the spots; for a Hottentot, in a country where hill and hollow are equally clothed with jungle, will, in the heat of a fatiguing day, throw his hatchet into a bush. and after weeks return to the same bush and take it up again.

The chase of the elephant, conducted in this manner, is an occasion of extraordinary excitement, but it is also a work of great fatigue and danger. The hardships and terrors of such a life are described by Mr. Rose, in the words of the European hunter whom he accompanied:

"I was surprised to hear D— say that it was his wish to leave his present life and to settle quietly on his farm. 'Indeed!' I said, 'I should have thought that this wild pursuit, and your former

dangerous trade, would render a quiet life somewhat sleepy.' 'I have a wife now, and shall have children, and have been driven to this by debt and necessity. I have nearly got over my difficulties, for in twenty months I and my Hottentots have killed eight hundred elephants; four hundred have fallen by this good gun; and, when I am free, I quit Scores of times have the elephants charged around me, even within a vard of the bush under which I had crept; and I feel that it was a chance I was not crushed. Once I had fired on a large troop in a deep ravine, one side of which was formed by a steep cliff, which echoed back the sound of the firing, and a hundred elephants, with upraised ears, and loud screams, and tossing trunks, rushed down the narrow pass and charged the echo, being the opposite side to that in which we had fired, and the one to which we had moved; myself and Hottentots lying in the bush, while they rushed by The boldest hunter is killed at last. I have. when pursued by a rhinoceros, sprung down a high bank, not knowing its depth, or whether I might not fall on a rock or stump. No, sir, it is a life of no common hardship and danger. I have been obliged to eat the veldtschoon (untanned leather shoes) from my feet!"

The elephant is sometimes fearfully revenged upon his great enemy, the ivory-hunter. Mr. Burchell has told the story of Carel Krieger's fate; and many similar accidents might doubtless be found in the rude traditions of the Africans:*

"He was an indefatigable and fearless hunter; and, being also an excellent marksman, often ventured into the most dangerous situations. One day

^{*} Travels, vol. i., p. 201.

having with his party pursued an elephant which he had wounded, the irritated animal suddenly turned round, and singling out from the rest the person by whom he had been wounded, seized him with his trunk, and lifting his wretched victim high in the air, dashed him with dreadful force to the ground. His companions, struck with horror, fled precipitately from the fatal scene, unable to turn their eyes to behold the rest of the tragedy. But on the following day they repaired to the spot, where they collected the few bones that could be found, and buried them near the spring. The enraged animal had not only trampled his body literally to pieces, but could not feel its vengeance satisfied till it had pounded the very flesh into the dust, so that nothing of this unfortunate man remained excepting a few of the larger bones."

We have before us a very picturesque account of a remarkable escape from destruction by an enraged elephant, which has been furnished to us by Mr. Pringle. The hero of the narrative is Lieut.

J. D. Moodie, of the 21st fusileers:

"In the year 1821, I had joined the recently-formed semi-military settlement of Fredericksburg, on the picturesque banks of the Gualana, beyond the Great Fish River. At this place our party (consisting chiefly of the disbanded officers and soldiers of the Royal African corps) had already shot many elephants, with which the country at that time abounded. The day previous to my adventure I had witnessed an elephant-hunt for the first time. On this occasion a large female was killed, after some hundred shots had been fired at her. The balls seemed at first to produce little effect, but at

length she received several shots in the trunk and eyes, which entirely disabled her from making resistance or escaping, and she fell an easy prey to her assailants.

"On the following day, one of our servants came to inform us that a large troop of elephants was in the neighbourhood of the settlement, and that several of our people were already on their way to attack I instantly sat off to join the hunters, but, from losing my way in the jungle through which I had to proceed, I could not overtake them until after they had driven the elephants from their first station. On getting out of the jungle, I was proceeding through an open meadow on the banks of the Gualana to the spot where I heard the firing, when I was suddenly warned of approaching danger by loud tries of 'Pas-op!—Look out!' coupled with my name in Dutch and English; and at the same moment heard the crackling of broken branches, produced by the elephants bursting through the wood, and the tremendous screams of their wrathful voices resounding among the precipitous banks. Immediately a large female, accompanied by three others of a similar size, issued from the edge of the jungle which skirted the river margin. As they were not more than two hundred yards off, and were proceeding directly towards me, I had not much time to decide on my motions. Being alone and in the middle of a little open plain, I saw that I must inevitably be caught should I fire in this position and my shot not take effect. therefore retreated hastily out of their direct path, thinking they would not observe me, until I should find a better opportunity to attack them. But in

this I was mistaken; for, on looking back. I perceived, to my dismay, that they had left their former course, and were rapidly pursuing and gaining ground on me. Under these circumstances I determined to reserve my fire as a last resource; and turning off at right angles in the opposite direction, I made for the banks of the small river. with a view to take refuge among the rocks on the other side, where I should have been safe. But. before I got within fifty paces of the river, the elephants were within twenty paces of me; the large female in the middle, and the other three on either side of her, apparently with the intention of making sure of me: all of them screaming so tremendously that I was almost stunned with the noise. I immediately turned round, cocked my gun, and aimed at the head of the largest, the female. But the gun, unfortunately, from the powder being damp, hung fire till I was in the act of taking it from my shoulder, when it went off, and the ball merely grazed the side of her head. Halting only for an instant, the animal again rushed furiously forward. I fell; I cannot say whether struck down by her She then made a thrust at me with trunk or not. her tusk. Luckily for me, she had only one, which, still more luckily, missed its mark. She then caught me with her trunk by the middle, threw me beneath her fore-feet, and knocked me about between them for a little space: I was scarcely in a condition to compute the number of minutes very Once she pressed her foot on my accurately. chest with such force that I actually felt the bones, as it were, bending under the weight; and once she trod on the middle of my arm, which, fortu. N 2

nately, lay flat on the ground at the time. During this rough handling, however, I never entirely lost my recollection; and owing to the roundness of her feet, I generally managed, by twisting my body and limbs, to escape her direct tread. While I was still undergoing this buffeting, Lieutenant Chisholm, of the R. A. corps, and Diederik, a Hottentot, had come up, and fired several shots at her, one of which hit her in the shoulder; and at the same time her companions, or young ones, retiring, and screaming to her from the edge of the forest, she reluctantly left me, giving me a cuff or two with her hind feet in passing. I got up, picked up my gun, and staggered away as fast as my aching bones would allow; but observing that she turned round and looked back towards me before entering the bush, I lay down in the long grass, by which means I escaped her observation.

"On reaching the top of the high bank of the river. I met my brother, who had not been at this day's hunt, but had run out on being told by one of the men that he had seen me killed. He was not a little surprised at meeting me alone and in a whole skin, though plastered with mud from head to foot. While he, Mr. Knight of the Cape regiment, and I were yet talking of my adventure, an unlucky soldier of the R. A. corps, of the name of M'Clane, attracted the attention of a large male elephant which had been driven towards the village. The ferocious animal gave chase, and caught him immediately under the height where we were standing, carried him some distance in his trunk, then threw him down, and bringing his four feet together, trod and stamped upon him for a considerable time, till he

was quite dead. Leaving the corpse for a little, he again returned, as if to make quite sure of his destruction, and kneeling down, crushed and kneeded the body with his fore-legs. Then seizing it again with his trunk, he carried it to the edge of the jungle and threw it among the bushes. While this tragedy was going on, my brother and I scrambled down the bank as far as we could, and fired at the furious animal, but we were at too great a distance to be of any service to the unfortunate man, who was crush-

ed almost to a jelly.

"Shortly after this catastrophe, a shot from one of the people broke this male elephant's left fore-leg, which completely disabled him from running. this occasion we witnessed a touching instance of affection and sagacity in the elephant, which I can not forbear to relate, as it so well illustrates the character of this noble animal. Seeing the danger and distress of her mate, the female before mentioned (my personal antogonist), regardless of her own danger, quitted her shelter in the bush, rushed out to his assistance, walked round and round him. chasing away the assailants, and still returning to his side and caressing him; and when he attempted to walk she placed her flank under his wounded side and supported him. This scene continued nearly half an hour, until the female received a severe wound from Mr. C. Mackenzie, of the R. A. corps, which drove her again to the bush, where she speedilv sank exhausted from the loss of blood; and the male soon after received a mortal wound also from the same officer.

"Thus ended our elephant hunt; and I need hardly say, that what we witnessed on this occasion of the interpidity and ferocity of these powerful animals, rendered us more cautious in our dealings with them for the future."

We have thus exhibited a picture of the chase of. the wild elephant in Africa. The rude modes of destruction to which he is there subjected presents a singular contrast to the caution, merciful even in cruelty, with which he is entrapped in India, to be reduced to domesticity. The African elephant was in former times tamed; but in no part of that extensive region is he now, as far as we know, employed by man, either for war or commerce. He is driven from forest to forest, as the desire of gain carries the hunter farther and farther from the abodes of civili-Man presents himself there only as a destroyer. He does not capture the "half-reasoning" beast to become his protector; to identify him with the follies of human pride; to teach him the value of human affections. The Africans are much disinclined to believe what they have not seen; like all other ignorant people, they are at once incredulous and superstitious; crediting a number of wild things beyond the reach of human evidence. and refusing to believe circumstances connected with ordinary matters, which are out of the range of their own experience. Thus, in many parts where the elephant abounds, the assertion that he is tamed and ridden in other countries passes ar one of the white-man's lies. How much more would the poor Bachapin withhold his credence ; he were told that the domestic elephant, if he es cape from confinement, will come back to his duty after a lapse of many years, upon hearing th.

voice of his keeper; that he will assist in capturing and coafining his own species; that he may be trusted without a guide, not only to carry burdens far greater than a horse or a buffalo could bear, but to deposite his load in any place to which he is accustomed, with as much precision as if it were taken from his back by human hands! It will be for us to exhibit, in the succeeding chapters, the various modes, all curious and instructive, in which the elephant is employed, when man has subdued his natural strength and sagacity, to administer to the necessities of civilized life. We have completed our picture of him in his state of nature.

CHAPTER VI.

DOMESTIC EMPLOYMENT OF ELEPHANTS IN THE RAST.—TRAINING.—DOCILITY.

An old traveller in the East, describing the mode of taming the wild elephant after his capture, says, "The people goad him with pointed canes till they force him into a narrow stall, in which he is securely fastened with strong ropes about his body and legs, and is left there for three or four days without food or drink. Then they bring a female to him, with food and drink, and unbind the ropes, and he becomes tame in three or four days."* The rapidity with which the elephant is here rep-

Fitch's Journey; in Kerr's Collection of Voyages, vol. vii.,
 p. 491.



resented as becoming content with his new lot is an exaggeration. The actual process is a much slower one. The animal is carefully attended upon: all his necessities are diligently supplied: he has abundance of food and drink; his skin is kept cool by continued applications of water; the flies that irritate him are driven off. One man, his intended keeper, is always about him, soothing him by the most diligent kindness. The animal gradually learns that his comforts must depend upon the will of his keeper, and he allows him, therefore, to approach him, and at length to get upon his back. As the elephant gains confidence, the keeper is more bold, and soon takes his position upon the neck, with the iron hook (hawkuss or ankush), ready to direct him, by catching hold of his ear or pressing it into his skin. To this rough monitor he gradually yields entire submission, as the horse submits to be urged on by the spur. method of reducing the elephant to obedience. pursued at this day in Hindostan, is doubtless that which has been observed for centuries in a country where nothing changes. The "Dwin-Shaster," one of the old sacred books of the Hindoos, says, "The mind is stronger than an elephant, whom men have found means to subdue, though they have never been able to subdue their own inclinations. But the ankush of the mind is true wisdom, which sees into the vanity of all worldly things."*

It is generally as long as six months before the elephant is rendered perfectly obedient to his keeper, so as to be conducted from place to place without difficulty. The females are invariably more

* Dow's Hindostan, p. lviii.

docile than the males, and require much less severity in their breaking in. The subjection of this animal. as in most other instances of the domina. tion of man over inferior creatures, is produced by impressing him with fear as well as affection. When his spirit is broken by his first confinement. he is soothed by unvarying kindness, till he permits his master to bestride him; and then comes the terror of the hook and the spike. Upon the whole, however, elephants are reduced to and kept in obedience more by kindness than severity. Corse complains that "the keepers trust too much to their good nature, before they are thoroughly acquainted with their dispositions." This circumstance indicates that, according to the experience of these professional superintendents of the education of the elephant, the nature of the animal is generally tractable. There are, however, great differences of character among them; which differences render it unsafe to trust too much to their obedience before it has been fully proved. Of the three elephants with which Bishop Heber travelled in Oude, one was described by his mohout as a fine-tempered beast, but the other two, he said, were "great rascals." Unruly elephants are by no means uncommon. Isbrand Ides, an ambassador from the Czar of Russia to China, saw at Pekin an elephant fastened with great chains on account of his evil temper; and such was the apprehension of mischief from his escape, that a pit was dug by his side that he might fall in if he broke his fetters.* Dampier, describing the curiosities of Tonquin, says, "Some of the elephants are very gentle and * Hist. Gen. des Voyages, v., 517.

governable; others are more indocile and unruly. When these rude ones are to pass through the streets, though only to be watered, the rider or dresser orders a gong or drum to be beaten before him, to warn people that an unruly elephant is coming; and they presently clear the streets and give a passage for the beast, who will do mischief to any that are in the way, and their riders or keep-ers cannot restrain him." Shah Jehan, the Mogul emperor, was so enraged by the disrespect of the ambassador of his rival, Shah-Abbas, the king of Persia, that he gave secret orders that when the ambassador entered a long and narrow street in the fortress of Delhi, leading to the hall of assembly, a vicious elephant should be let loose upon him. The differences of character between elephants are so marked, that at the court of Siam, according to Tavernier, "if any favourite elephant falls sick and dies, he is, with funeral pomp, burned to ashes with reeds and the weight of his body of sweet wood: but if he be an offender, he is not burned, but buried." The temper of the elephant cannot always be calculated upon. The most morose will sometimes become perfectly docile, and the most gentle will occasionally be intractable and revenge-Mr. Williamson tells an anecdote of a male elephant belonging to a gentleman at Chittagong. which he endeavoured for ten years, but in vain. to render obedient. "He was repeatedly offered for sale at a low price; but his character was so well known that none would purchase him. It is customary in that district to have the firewood.

Dampier's Voyages, vol. ii., p. 68. † Bernier, vol. i., p. 174. † Tavernier, p. ii., b. iii., c. 19

which is cut into stumps of about a foot or less in diameter, and perhaps five or six feet long, piled regularly, and this work is usually performed by elephants; when properly trained, they will execute it as well as any labourers. The animal in question could not be induced to perform this drudgery; and all attempts to enforce his obedience having proved useless, his master at last gave up the point: to his utter astonishment, the elephant became suddenly good-tempered, and went of his own free-will to the woodyard, where he not only exerted himself greatly, but was, in the regularity of his work, at least equal to those which had more practice."* Was this extraordinary change produced by any physical alteration in the animal, or was it the result of a process of reasoning, by which the creature discovered that the labour, to which his companions submitted, would be less annoving than the constant punishment and irritation to which he was subjected by his disobedience?

The elephant, like all other animals, is sometimes made unruly by injudicious punishment, and this might have been the case in the remarkable conduct above described. A fearful example of this came under the notice of Mr. Zoffany, an English artist, who painted a spirited picture of the circumstance, of which he was an eyewitness. In the progress of the embassy from the Vizier of Oude to Calcutta, to meet Lord Cornwallis, a male baggage elephant, carrying a number of people on his back, was suddenly irritated by his mohout, who struck him violently with his hawkuss. The unhappy man was in an instant pulled from his seat

4 Oriental Field Sports, p. 30.



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by the enraged beast, who suspended him by his trunk in a way which rendered escape impossible, and then dashed him to pieces. The foregoing woodcut is taken from the principal group in Mr.

Zoffany's representation.

Examples such as this, of sudden and violent revenge, are comparatively rare. The elephant, however, is mindful of injuries, exactly in the same measure that he is grateful for benefits. The modes in which he avenges trifling wrongs are often extremely ludicrous; and these seem to be employed as if to afford satisfaction to his own consciousness of physical power. Every one recollects the story of the elephant at Delhi, that halfdrowned an unhappy tailor with water from his trunk, because the man had pricked him with his needle instead of giving him an apple. Mr. Williamson tells an anecdote of an elephant who used to be called the Paugul, or fool, but who vindicated his claim to another character in a very singular manner. He had refused to bear a greater weight upon his back than was agreeable to him, by constantly pulling part of the load off his back: and a quartermaster of brigade, irritated at his obstinacy, threw a tent in at his head. In a few days after, as the animal was going from the camp to water, he overtook the quartermaster, and, seizing him with his trunk, lifted him into a large tamarind. tree which overhung the road, leaving him to cling to the boughs, and get down as he could. Lieutenant Shipp, to try this memory of injuries, gave an elephant a large quantity of Cayenne pepper between some bread. The animal was much irritated by the offence; and about six weeks after.

when the unsuspecting joker went to fondle him, he endured the caresses very placidly, but finished the affair by drenching his persecutor with dirty water from head to foot. The keepers of menageries have always some stories of the odd methods in which elephants avenge their wrongs. In a very pleasant book for young persons, abounding in valuable information, mention is made of a recent instance of this quality: a man took hold of an elephant's tail in the streets of London, when the animal was so displeased by the indignity, that he turned suddenly round, and, grasping the man with his trunk, placed him against some iron rails, where he kept him prisoner till the keeper, by his entreaties, procured the offender's release.*

That the elephant should be sensible of injuries is not surprising; for, when once domesticated, he is of a confiding nature, and capable of strong attachment to human beings. Ælian tells us of an elephant that was passionately fond of a girl that sold flowers in the streets of Antioch; and Athenæus of one that so attached himself to a child. that he would only eat in his favourite's presence: and, when the little one slept, was incessantly occupied in driving away the flies which surrounded Strabo says that, sometimes, when the driver of an elephant is removed from him, he will pine to death. Lieutenant Shipp has a very minute account of an elephant, who, having killed his mohout in a fit of rage, was so sensible of his offence, that he gradually lost his health, and died six months In Purchas's collection of voyages there is a story of an elephant that mourned fifteen

* Bertha's Visit to her Uncle in England.

days for his master, the King of Ava, who was slain in battle. In such stories there is always some allowance to be made for the imagination of the persons who relate them; for it is to be observed that, of all subjects, that of the sagacity of animals admits of most exaggeration. We must believe just as much as is consistent with what we really knew, and no more. It is not incredible that an elephant should feel the loss of his driver, in the same degree that a dog will exhibit unequivocal symptoms of grief in the absence of his master. and watch over his grave when he dies. The elephant, even as much, and perhaps more, than the dog, is indebted to those who have the care of him for a variety of agreeable sensations. In the East he is not only regularly fed, but carefully tended. so as to prevent the annoyances of heat and insects. "We went," says Tavernier, "to the river, to see the king's and great noblemen's elephants washed. When they have soaked themselves in the water. they are rubbed and cleaned with pumice-stone; and after they are dry, they are rubbed with oil of cocoa." The elephant, too, "has learned to have a pride in the ornaments and trappings with which man, for the purpose of pomp and parade, has clothed him."* The painted hide, the embroidered housing, the silver bells suspended over the back by a massy chain, the rings of gold upon the tusksthese are delights to the elephant, who, like other quadrupeds, and some bipeds, is proud of the badges of his slavery. Pliny, upon the authority of Antipater, relates that one of the elephants of Antiochus, being deprived of his silver trappings for refusing

[•] Home, Comp. Anat., vol. iii., p. 181.

to sound the depth of a river, refused to eat, and died under the disgrace. This is doubtless an exaggeration of a quality in the animal which was observed by the ancients as well as the moderns. But, unquestionably, the domesticated elephant delights in magnificence; and thus he is peculiarly adapted for the cumbrous pageantry of an Asiatic That he should adapt himself to the circumstances around him. and. as Bernier describes him, move with a solemn and dignified step, as if proud of his gorgeous attire, is a natural consequence of his extraordinary docility. But that he should have any instinctive veneration for the pageants of which he forms a part, or any natural reverence for the despots whose pride is flattered by them, is just as unlikely as that all other elephants should salam (make obedience) to those of Cevlon, in deference to their superior merits, as the Cingalese believe. He becomes proud of his trappings, because he is habituated to them upon all occasions of ceremonial, when he really receives impressions in unison with the general pomp, from the words and gestures of those around him. And this consideration brings us to the various modes by which his docility is maintained.

The obedience of the elephant to his mohout is a habit which he acquires from the earliest hours of his captivity. One man invariably attends upon him; feeds, caresses, punishes him. On a journey, "the mohout says nothing, but guides him by pressing his legs to his neck, on the side to which he wishes him to turn, urging him forward by the point of a formidable goad, and stopping him by a blow on the forehead with the butt-end of the same

instrument." The molout is the real moving power of the elephant's services; the animal knows who bestrides him, and his obedience is rarely withheld. The attendants of the elephant practise a somewhat ludicrous mode of assisting the command of the driver. "While the elephant is going on, a man walks by his side, telling him where to tread, bidding him 'take care,' 'step out,' warning him that the road is rough, slippery, &c., all which the animal is supposed to understand, and take his measures accordingly."* This assistance to the mohout is probably, in most cases, an unnecessary parade, arising from the almost infinite division of labour in Hindostan. But the practice of addressing the elephant in this manner proceeds from the general belief that he understands what is said to him. belief is, of course, carried to a ridiculous excess in many instances; and it has been accompanied by a notion that he can speak, as in the case of the elephant described by Christopher Acosta: At Cochin, according to this writer, there was an elephant that worked at the port with all the skill of a human labourer. One day, when he was much fatigued, the governor of the port desired him to assist in launching a boat. The elephant refused; and the man of authority, having in vain employed all his caresses, commanded him to do it in the name of the King of Portugal. The loval beast. it is added, instantly replied, "I will, I will," and performed his task. This story may explain some of the old fables of the elephant speaking; for, in the Malabar language, "I will" is expressed by "hoo;" a very natural sound for an elephant to

make, not upon the invocation of the King of Portugal, but upon the more effectual stimulus of the blow which probably accompanied the utterance of the magical name. Mr. Williamson says, that "elephants, after being some time in training, acquire a perfect intelligence regarding particular words of command in general use. They will answer to their respective names; and, uttering a shrill note. somewhat resembling the sound produced by blowing forcibly into a shell, resort to their mohouts when The individual dogs of a kennel of hounds will do the same; and both dogs and horses perfectly well understand words to which they are accustomed. Elephants apparently go somewhat farther in their docility; for they will perform particular acts, upon the promise of special rewards, such as arrack or sweetmeats; and it is extremely dangerous, when the work is finished, to make any attempt not to complete the bargain. This comprehension that he shall receive a gratification upon certain conditions of service, is probably induced in the elephant by accustoming him, in the first place, to see the promised reward, and systematically giving it to him after the work is done. A connexion would be thus established in the animal's mind between his own exertions and the benefit they were to procure him. At any rate, a distinct relation between the word and the thing must be clearly marked; and from the necessary difficulty of doing this in any case where a different intelligence from the human is to be acted upon, it is evident that the use of language must be very limited. Words are used, probably, almost always in union with * Orientales ports, p. 41.

gestures; and the gesture, when the animal is strictly habituated to one meaning for one movement of his instructer, is, in all likelihood, the more effectual mode of communication. The scene which has been described by the author of Waverley, where the justice of Hyder Ali was summarily executed upon an offender by signal to an elephant, is not a fanciful picture.* Bishop Heber says, "the command these men (the mohouts) have over their elephants is well known; and a circumstance lately occurred to one of them making a sign to his beast, which was instantly obeyed, to kill a woman who had said something to offend him. The man was executed before our arrival."† Tavernier, travelling with the Mohammedan army of the mogul, was astonished to see the elephants, to the great annoyance of the Hindoo inhabitants, seize upon the little images which stood before the pagodas, and dash them to pieces. Tavernier discovered the truth, although it was carefully concealed: the intolerant drivers made a signal to their animals to destroy the monuments of a worship which was offensive to them.

The most remarkable peculiarity in the docility of an elephant is the certainty with which he may be trusted to perform particular labours, without the immediate superintendence of man. That a well-trained one should be governed by a child, as is frequently the case, is not extraordinary; for a gentle horse will yield the same habitual obedience. But that the elephant should readily comprehend that he has an especial duty to accomplish, and pa-

+ Journal, i., 36.

^{*} Chronciles of the Canongate-The Surgeon's Daughter.

tiently set about doing it in his own way, and without control or assistance, is certainly a forcible proof of a great docility, which could only be founded upon a superior sagacity. Many elephants are in the habit of tying their own legs at night; they are brought to this by custom. But they will perform duties of a variable nature, in which a uniform habit has not been acquired; and which could only be accomplished by an extreme aptitude of comprehension. Thus an elephant may supply the place of a nurse. "I have myself," says an officer who has served in India. " seen the wife of a mohout (for the followers often take their families with them to camp) give a baby in charge to an elephant while she went on some business, and have been highly amused in observing the sagacity and care of the unwieldy nurse. The child, which, like most children, did not like to lie still in one position, would, as soon as left to itself, begin crawling about; in which exercise it would probably get among the legs of the animal, or entangled in the branches of the trees on which he was feeding: when the elephant would, in the most tender manner, disengage his charge, either by lifting it out of the way with his trunk, or by removing the impediments to its free progress. If the child had crawled to such a distance as to verge upon the limits of his range (for the animal was chained by the leg to a peg driven into the ground), he would stretch out his trunk, and lift it back as gently as possible to the spot whence it had started."* With the same judgment, an elephant will task his strength without human direction. "I have seen." says M.

* Twelve Years' Military Adventure.

D'Obsonville, "two occupied in beating down a wall which their cornacs (keepers) had desired them to do, and encouraged them by a promise of fruits and They combined their efforts; and, doubling up their trunks, which were guarded from injury by leather, thrust against the strongest part of the wall, and, by reiterated shocks, continued their attacks, still observing and following the effect of the equilibrium with their eyes; then, at last, making one grand effort, they suddenly drew back together. that they might not be wounded by the ruins." We have heard of an elephant at Barrackpoor that would swim, laden with parcels, to the opposite shore of the Ganges, and then unload himself with the utmost precision. In the year 1811, a lady, who related the circumstance to us, staying with her husband, an officer in the Company's service, at a house near the fort of Tavancore, was astonished early one morning to observe an elephant, unattended, marching into the courtyard, carrying a box in his trunk, apparently very heavy. He deposited this, and, going his way, soon returned with a simihar box, which he placed by the side of the other. He continued this operation till he had formed a considerable pile, arranged with undeviating order. The boxes contained the treasure of the Rajah of Travancore, who had died in the night, and of whose property the English commander had taken possession, thus removing the more valuable for greater security.

"The oxen that served in the royal gardens of Susa, to water them, and turn certain great wheels to draw water for that purpose, to which buckets were fastened (such as there were many in Lan-

guedoc), being ordered every one to draw a hundred turns a day, they were so accustomed to this number, that it was impossible by any force to make them draw one turn more; but, their task being performed, they would suddenly stop and stand still."* The oxen of Susa had one unvarying task, such as that of a horse in a mill; and although it indicated some intelligence in the animals to know when that task was accomplished, this habitual accuracy is not to be compared, as an intellectual effort, to the discretion of the elephant. The oxen were wholly controlled by habit; the elephant accommodates himself to circumstances. When the old starved elephant which Bishop Heber saw, fell down, another elephant of very large size, and in somewhat better plight, was brought "I was much struck," says the bishop, "with the almost human expression of surprise, alarm, and perplexity in his countenance when he approached his fallen companion. They fastened a chain round his neck and the body of the sick beast, and urged him in all ways, by encourage. ment and blows, to drag him up, even thrusting spears into his flanks. He pulled stoutly for a minute; but on the first groan his companion gave he stopped short, turned fiercely round with a loud roar, and with his trunk and fore feet began to attempt to loosen the chain from his neck."+ sympathy of the animal for his suffering fellow was greater than his habitual obedience. But elephants accommodate themselves to circumstances in even a more extraordinary manner than such a refusal

^{*} Montaigne's Essays, book ii., c. 12. † Journal, vol. ii., p. 47.

as this to perform a disagreeable task. The Baron de Lauriston states that he was at Lacknaor when an epidemic distemper was raging, and when the road to the palace was covered with the sick and the dving. The Nabob came out upon his elephant. His slaves, regardless of their unhappy fellow-creatures, made no attempt to clear the road; but the more charitable beast, without any command, lifted some out of the way with his trunk, and stepped so carefully among the rest that none were hurt. This was. probably, a high exercise of the instinctive faculty which we have already noticed, by which the bulky elephant has a terror of smaller animals coming in his path. An effect of intelligence, even more extraordinary than the instances we have mentioned. is recorded upon the authority of an artillery offi-"The battercer who witnessed the transaction. ing train going to the siege of Seringapatam had to cross the sandy bed of a river, that resembled other rivers of the Peninsula, which leave, during the dry season, but a small stream of water running through them, though their beds are mostly of considerable breadth, very heavy for draught, and abounding in quicksands. It happened that an artilleryman, who was seated on the tumbrill of one of the guns, by some accident fell off, in such a situation that, in a second or two, the hind wheel must have gone over him. The elephant, which was stationed behind the gun, perceiving the predicament in which the man was, instantly, without any warning from its keepers, lifted up the wheel with its trunk, and kept it suspended till the carriage had passed clear of him."* Examples such

* Twelve Years' Military Adventure.

as these, and many more that might be adduced, would lead us to conclude, although it may be presumptuous to differ from one who has experience as a warrant for his opinions, that the sentence which a recent traveller has pronounced upon the sagacity of the elephant is somewhat hasty and prejudiced. Mr. Crawfurd says, "The courage and sagacity of this animal have been as much exaggerated as its modesty. Its bulk, its strength, and its trunk, are its great recommendations, especially the latter. If man has been called the wisest of animals because he posseses hands, the elephant may, with as much truth, be called the wisest of quadrupeds because he possesses a trunk. But for this instrument and its great strength, I think it doubtful whether it would be ranked higher, in intellectual endowments, than a despised animal of the same natural family—the hog." That man has any right to be called the wisest of animals. because he possesses hands, is easily contradicted: for if the possession of hands were any measure of wisdom, the monkey, who has four, would be twice as wise as the man. The hog may possess as high intellectual endowments as the elephant; but we have yet no evidence of such a fact. elephant is very much his superior in general docility (for learned pigs are rare wonders), and the possession of great docility is generally an evidence of a high degree of intelligence.

It is not an unfrequent occurrence in India for a domesticated elephant to escape to the wild herd; and several who have thus thrown off the subjection of their masters have been retaken, after an absence of months, and even of years. This fact

has been stated, by very competent observers. as an evidence against the sagacity of the animal. appears to us only to prove that those who formerly asserted that it was not possible, by any art, to entrap an elephant a second time, were mistaken in this, as in many other notions, of the habits of There are two interesting acthis quadruped. counts of elephants who had thus escaped and were retaken, given by Mr. Corse in the Philosoph. ical Transactions for 1799. In one instance, a female who had twice escaped, after having been perfectly domesticated as a riding elephant, was taken in the keddah as usual. She was easily recollect. ed: for she seemed perfectly reconciled to her situation, attended to her name, came to the side of the keddah when called, ate from the hands of the hunters, and at last knelt down when she was directed. In another case, that of a male who had escaped about eighteen months, the animal was furious when retaken in the keddah, and in every respect appeared as wild and outrageous as the other elephants. At length an old hunter boldly rode up to him, he having been previously recognised, and ordered him to lie down, pulling him by the ear. The animal seemed quite taken by surprise, and instantly obeyed the word of command. The habit of obedience was stronger than the habit of liberty. These elephants had escaped upon some sudden impulse; one was frightened at coming upon a tiger's track. They were retaken, because they did not separate themselves from their companions who were pursued by the hunters. Even this circumstance does not appear to disprove the general sagacity of the animal; for the individual recollections which these elephants retained of their state of captivity might not be unpleasant ones. One thing is certain, that their habits of obedience were



Warren Hastings' Elephant

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not eradicated by their long absence from servitude. They yielded themselves, without any continued resistance, to the control of their old masters: and all that it may be necessary to show of the domestic habits of the animal is comprised in his docility. That, it seems, cannot be changed by time or absence, by the pleasure of freedom or the fear of servitude. Without this readiness and constancy of obedience, how, indeed, could the elephant have ever been subdued, or how could he be retained in subjection?

Warren Hastings, the governor-general of India, possessed an elephant which had been ten years absent from the rule of man. His keeper being dismissed, he was refractory to all others who attempted to control him; and at length escaped to the wild herd. After the long interval we have mentioned, his old keeper recognised him in a keddah, and he instantly submitted himself to him. Mr. Zoffany painted the portrait of this animal; and in the key to his published print of a tigerhunt, vouches for the authenticity of this account.*

^{*} The preceding cut is from Mr. Zoffany's print. The instrument which the animal carries with his trunk is described as a cowtail with a silver handle, which elephants of rank bear for driving off the flies.

CHAPTER VII.

EMPLOYMENT OF REEPHANTS IN THE EAST.—TRAV-ELLING.—SPORTS.

"THE Dutch East India Company," says Thunberg, "make use of elephants everywhere, to transport beams and other heavy articles."* Such an employment as this of the vast strength of the elephant is one of the most obvious modes of rendering him useful. That strength would naturally be applied, without much discrimination, to all cases where extraordinary force was required, in a state of society when the power of machinery was imperfectly understood, and under governments that were indifferent to the cost of maining a large stud of these animals. In this manner Kublai Khan covered an artificial hill with fullgrown trees, removing them on the backs of elephants. "Not far from the palace, on the northern side, and about a bowshot distance from the surrounding wall, is an artificial mound of earth, the height of which is full a hundred paces, and the circuit at the base about a mile. It is clothed with the most beautiful evergreen trees; for whenever his majesty receives information of a handsome tree growing in any place, he causes it to be dug up, with all its roots and the earth about them, and, however large and heavy it may be, he has * Travels, iv., 245.

it transported by means of elephants to this mount. and adds it to the verdant collection."* oriental despot accomplished, with the most profuse expenditure of animal power, has been executed in our own day by a private gentleman, through the skilful application of scientific principles, at a very moderate expense. When Timour built his great mosque at Samarcand, ninety-five elephants were engaged in drawing the stones. When shipbuilding was practised in a rude manner in India, elephants were employed to force the vessel off the stocks into the water. Verthema, who travelled in India in 1503, gives an example of their power of dragging ships on shore. saw an instance of the extraordinary strength of these animals while at Cananore, where some Mohammedans endeavoured to draw a ship on the land, stern foremost, upon three rollers; on which occasion three elephants, commodiously applied, drew with great force, and bending their heads down to the ground, brought the ship on the land." † In another place the same traveller says, "I once saw the trunk of a tree overthrown by one elephant. which twenty-four men had in vain attempted." We have already seen that the vast power of the arimal has been exercised in beating down walls. In the war of Coromandel, in 1751, the gates of the fort of Ponomaley, in which the English under Clive made a spirited defence, were attempted to be battered down by elephants, whose foreheads were covered with iron plates. 1 Such uses of the

^{*} Marco Polo, b. ii., c. 6.

[†] Hakluyt's Collection of Voyages. † Orme's Hindostan, vol. i., p. 198.

power of this quadruped are, of course, fast yielding to the more effectual power of machines, which are maintained at less cost, and do their work with more precision. The present employment of elephants in the East is principally confined to the carriage of persons and of heavy burdens in travelling, and on the march of an army; to field sports;

and to processions and ceremonials.

"At Barrackpoor," says Bishop Heber, "for the first time I mounted an elephant, the motion of which I thought far from disagreeable, though very different from that of a horse. As the animal moves both feet on the same side at once, the sensation is like that of being carried on a man's shoulders. A full-grown elephant carries two persons in the 'howdah,' besides the 'mohout,' who sits on his neck, and a servant on the crupper behind, with an umbrella. The howdah itself, which Europeans use, is not unlike the body of a small gig, but without a head."* Capt Williamson, who possessed, probably, much of the sportsman's desire of rapid motion, says, "the gait of an elephant is very peculiar, being similar to the artificial pace of ambling taught to some horses. It is far from displeasing in a horse, but causes such a motion when mounted on an elephant as rarely to be borne for any distance. Indeed, I know nothing more uncomfortable and tedious, I may even say painful, than a long journey in a howdah. It occasions a lassitude not to be described. We must suppose that habit reconciles persons to it, as we see the natives travel, for perhaps twenty miles or more in a forenoon, without any apparent uneasiness. The

4 Journal, i., 36.

largest elephants are, in general, the most uncomfortable in this respect."* The smaller elephants are sometimes ridden with a saddle and stirrups. Others have a pad, on which six or eight persons can sit, some astride and some sideways. The animal kneels down that the riders may ascend; and as he is generally impatient while being mounted, a man puts his foot upon his fore-leg, and sometimes even presses it with a spear. A ladder is attached



* Oriental Sports, p. 31.

to the elephant's side for the use of those who ride in the howdah. The natives descend from their

seats upon the pad by means of a rope.

The guidance of an elephant upon which persons of wealth and authority ride in British India, is invariably committed to the mohout. In Ava the practice is different. Mr. Crawfurd says, "After the elephant combats were over, the king prepared to take his departure. His elephant, one of the noblest animals I have ever seen, having the trunk. head, and part of the neck of a white flesh-colour. and in other respects altogether perfect, was brought up close to the shed under which we were sitting. and he mounted it with great agility, placed himself upon the neck of the animal, took the hook in his hand, and seemed to be perfectly at home in this employment. We afterward saw the heir-apparent, a child of thirteen years of age, guiding his elephant in the same way. This practice is, I believe, peculiar to the Burmans; for, in Western India at least, no person of condition ever condescends to guide his own elephant. There is, at least, some manliness in the custom; and I should not be surprised to find that the neck of the elephant would be found, on experience, the most agreeable and easy seat to the rider."

In the present times the employment of elephants in Oriental travelling has little of the ancient pomp and splendour which used to attend the progresses of the Mogul princes. A native rajah now and then comes into Calcutta, upon some mission to the British authorities, riding in a magnificent howdah, with his elephant covered with brilliant trappings. But, generally, the stately animal is used for the

conveyance of the manifold servants that wait upon the rich in India; or he is laden with tents and tent-poles. or with water-bottles, and pots, and saucepans, and every other paraphernalia of the kitchen, slung about his body in all directions. His appear. ance, then, is somewhat more ludicrous than dignified. But in the days of Timour, when the despot rode," in a chariot with four wheels, upon which is a fair chamber of sweet-smelling lignum aloes, which is within covered with plates of fine gold, dubbed with precious stones and great pearls, and drawn by four elephants;"* or in those of Akbar, when "magnificent amarees were put upon the backs of swift-paced elephants;"† or in those of Jehanghir, who rode on an elephant through the streets of his capital, followed by "twenty royal elephants for his own ascending, so rich, that in precious stones and furniture they braved the sun," and whose "wives, on their elephants, were carried like parakitoes (paroquets), half a mile behind him;"‡ in those days the journeys of the elephant were occasions of habitual pomp. The most minute description of these splendours may be found in Bernier's ac-count of the progress of Aurengzebe, from Delhi to Kashmire, in the year 1664.

The perfection of European travelling is extreme speed: the march of this Mogul prince through his dominions was as measured as a funeral pageant. Bernier, after having been two months on the road from Delhi to Lahore, a distance of a hundred and

^{*} Sir John Maundeville.

[†] Ayeen Akbery. An amaree, or amari, is a seat with a

canopy. ‡ Sir T. Rowe, quoted in Purchas.

twenty leagues-about the same that an English mail performs in forty-eight hours—says, "this is indeed slow and solemn marching." When we consider, however the retinue with which Aurengzebe moved, we shall cease to wonder at the pace at which he advanced. "In this march from Delhi to Kashmire," says Bernier, "there are at least one hundred thousand horsemen, and more than one hundred and fifty thousand animals, comprising horses, mules, and elephants; besides these, there cannot be much less than fifty thousand camels, and nearly as many oxen and horses, employed to carry the wives and children, the grain, and other provisions belonging to the poor people connected with the bazaars, who, when they travel, take with them. like the gipseys, the whole of their families, goods, and chattels. The servants in the army must be indeed numerous, since nothing is done without their assistance. Many are of opinion that the camp contains between three and four hundred thousand persons."* The principal uses of the elephants in this enormous throng were to carry "the most bulky things, such as the large tents, with their heavy pillars;" and to administer to the splendour of the prince and his court. "Sometimes the king rides on horseback, especially when the weather is favourable for hunting: and at other times he is carried by an elephant, in a mik-dember, or in a hauze, which is by far the most striking and splendid style of travelling, as nothing can surpass the richness and magnificence of the harness and trappings. The mikdember is a small house, or square wooden tower, gilt and painted; and the hauze an oval chair with . * Travels, ii., 118. .

a canopy of pillars, also superbly decorated with

colours and gold."*

The mind of Bernier, who appears to have had an uncommon share of the liveliness of the French character, was highly excited by the splendours of the seraglio in this extraordinary march. dwells upon the different modes of travelling used by the "princesses and great ladies;" the gilt and painted "tchandoules which are borne on men's shoulders," and the "stately and close palanquins." But the pageantry of the elephants employed in the conveyance of "these lovely and distinguished females," the costly furniture, the silver bells, the latticed mik-dembers covered with silken nets, the embroidery, and fringes and tassels, seem to have principally gratified his eager curiosity. avoid," he says, "dwelling on this pompous procession of the seraglio. It strongly arrested my attention during the late march, and I feel delight in recalling it to my memory. Stretch imagination to its utmost limits, and you can conceive no exhibition more grand and imposing than when Rochinara Begum (Aurengzebe's sister), mounted on a stupendous Pegu elephant, and seated in a mik-dember blazing with gold and azure, is followed by five or six other elephants with mik-dembers nearly as resplendent as her own, and filled with ladies attached to her household. Close to the princess are the chief eunuchs, richly adorned and finely mounted, each with a cane in his hand; and surrounding her elephant, a troop of female servants from Tartary and Kashmire, fantastically attired, and riding handsome pad-horses. Besides these attendants

* Travels, ii., 106.

are several eunuchs on horseback, accompanied by a multitude of pagys, or lackeys, on foot, with large canes, who advance a great way before the princess, both to the right and to the left, for the purpose of clearing the road, and driving before them every Immediately behind Rochinara Begum's retinue appears a principal lady of the court, mounted and attended much in the same manner as the This lady is followed by a third; she by a fourth; and so on until fifteen or sixteen females of quality pass, with a grandeur of appearance, equipage, and retinue, more or less proportionate to their rank, pay, and office. There is something very impressive of state and royalty in the march of these sixty or more elephants; in their solemn, and, as it were, measured steps; in the splendour of their mik-dembers, and the brilliant and innumerable followers in attendance: and if I had not regarded this display of magnificence with a sort of philosophical indifference, I should have been apt to be carried away by the similar flights of imagination as inspire most of the Indian poets, when they represent the elephants as conveying so many goddesses concealed from the vulgar gaze."* The "philosophical indifference" to such pageants is to be found in the consideration that they cannot exist but in connexion with despotic power; and that the splendour of such kings as Timour and Aurengzebe was bought at the enormous price of the liberty and happiness of the people over whom they



^{*} The readers of modern poetry will remember the Introduction to "Lalla Rookh," in which the elephants that set out from Delhi are described "bearing on their backs small turrets, in the shape of litte antique temples, within which the ladies of Lalla Rookh lay, as it were, enabrined."

ruled. The simplicity which is one of the best characteristics of a free government is far less gratifying to the fancy, but it affords an infinitely higher

pleasure—it satisfies the reason.

The progresses of the Mogul princes through their dominions were ordinarily connected with the purpose of affording the monarch the pleasure of the chase. They took the field against the antelope and the tiger with the same parade that they went to war. In the camp of Aurengzebe there were tents for choice elephants, and for the animals employed in hunting; for the birds of prey; for dogs; for leopards; for nyl-ghaus, and Bengal buffaloes; and even for lions and rhinoceroses, carried only for show. All the uncultivated land on the road was guarded with the utmost vigilance, to preserve the game for the king and his nobles, and the severest punishments were inflicted upon those who disturbed it. Human nature is the same, whether in Asia or in Europe; and the great, therefore, have always sought to be exclusive, and to be tyrannical in their exclusiveness. In the reign of Kublai Khan it was "strictly forbidden to every tradesman, mechanic, or husbandman throughout his majesty's dominions, to keep a vulture, hawk, or any other bird used for the pursuit of game, or any sporting dog;" but as the will of the one tyrant was supreme, the game-laws reached even the highest; for no nobleman or cavalier was "to presume to chase beast or bird in the neighbourhood of the place where his majesty takes up his residence."* The king, therefore, had an abundant command of well-stocked domain, sufficient, indeed, to satisfy

^{*} Marco Polo.

any admirer of the modern battu. The great ambition of the Mogul, in the time of Aurengzebe, was to kill a lion mounted upon his elephant. Such an event gratified his pride, and was a favourable omen for the state. Bernier has described this ceremony

with his usual spirit:

"But of all the diversions of the field, the hunting of the lion is not only the most perilous, but it is peculiarly royal; for, except by special permission, the king and princes are the only persons who engage in the sport. As a preliminary step, an ass is tied near the spot where the gamekeepers have ascertained the lion retires. The wretched animal is soon devoured, and after so ample a meal the lion never seeks for other prey, but, without molesting either oxen, sheep, or shepherd, goes in quest of water, and, after quenching his thirst, returns to his former place of retirement. He sleeps until the next morning, when he finds and devours another ass, which the gamekeepers have brought to the same spot. In this way they contrive during several days to allure the lion, and to attach him to one place; and when information is received of the king's approach, they fasten at the spot an ass where so many others have been sacrificed, down whose throat a large quantity of opium has been forced. This last meal is, of course, intended to produce a soporific effect upon the lion. The next operation is to spread, by means of the peasantry of the adjacent villages, large nets, made on purpose, which are gradually drawn closer, in the manner practised in hunting nil-ghaus. Everything being in this state of preparation, the king appears on an elephant barbed with iron, and attended by the grand master

of the hunt, some omrahs mounted on elephants, and a great number of gourze-berdars on horseback, and of game-keepers on foot, armed with half-pikes. He immediately approaches the net on the outside, and fires at the lion with a large musketoon. The wounded animal makes a spring at the elephant, according to the invariable practice of lions, but is arrested by the net; and the king continues to discharge his musketoon, until the lion is at length killed.

"It happened, however, during the last hunt, that the enraged animal leaped over the net, rushed upon a cavalier, whose horse he killed, and then effected his escape for a time. Being pursued by the hunts. men, he was at length found, and again enclosed in The whole army was on that occasion subjected to great inconveniences, and thrown into a considerable degree of confusion. We remained three or four days patrolling in a country intersected with torrents from the mountains, and covered with underwood and long grass that nearly concealed the camels. No bazaars had been formed, and there were no towns or villages near the army. those who, during this scene of disorder, could satisfy the cravings of hunger! Shall I explain the weighty reason of this long detention in such abominable quarters? You must know, then, that as it is considerd a favourable omen when the king kills a hon, so is the escape of that animal portentous of infinite evil to the state. Accordingly, the termination of the hunt is attended with much grave ceremony. The king being seated in the general assembly of the omrahs, the dead lion is brought before him; and when the carcass has been accurately

measured and minutely examined, it is recorded in the royal archives that such a king on such a day slew a lion of such a size and of such a skin, whose teeth were of such a length, and whose claws were of such dimensions."**

We find in the annals of Hindostan that the lion was occasionally hunted without these precautions. Bernier gives us a remarkable instance. Aurengzebe, who was gratified by displays of personal courage, and who had distinguished himself when a youth by attacking an elephant single-handed,† commanded his son, Sultan Mauzum, "in a full assembly of omrahs, to kill a lion which had descended from the mountains, and was then laving waste the surrounding country. The grand master of the hunt ventured to hope that Sultan Mauzum might be permitted to avail himself of those capacious nets which are ordinarily made use of in so perilous a chase. 'He shall attack the lion without nets,' sternly replied the king. 'When I was prince, I thought not of such precautions. An order given in so decisive a tone could not be disobeyed. The prince declined not the fearful undertaking. He encountered and overcame the tremendous beast with the loss of only two or three men; some horses were mangled, and the wounded lion bounded on the head of the sultan's elephant."±

Marco Polo has recorded, with great minuteness, the mode of the Grand Khan's proceeding to the chase, with his ten thousand falconers, and ten thousand "tarkaol" or waiters, whose duty it was

† Dow.

^{*} Travels, vol ii., p. 115.

¹ Travels, vol. i., p. 204.

to secure the stray falcons. "On account of the narrowness of the passes in some parts of the country where his majesty follows the chase he is borne on two elephants only, or sometimes a single one, being more convenient than a greater number. But under other circumstances he makes use of four, upon the backs of which is placed a pavilion of wood, handsomely carved, the inside being lined with cloth of gold, and the outside covered with the skins of lions; a mode of conveyance which is rendered necessary to him during his hunting excursions, in consequence of the gout with which his majesty is troubled. In the pavilion he always carries with him twelve of his best gerfalcons, with twelve officers from among his favourites, to bear him company and amuse him. Those who are on horseback by his side give him notice of the approach of cranes or other birds, upon which he raises the curtain of the pavilion, and when he espies the game, gives directions for letting fly the gerfalcons, which seize the cranes and overpower them after a long struggle. The view of this sport, as he lies upon his couch, affords extreme satisfaction to his majesty." It would be difficult to imagine a more absurd attitude of despotism than is here described; a whole district is thrown into confusion, useful labours suspended, private property violated by thousands of armed hunters, and the entire population subjected to odious restraints, that a gouty man may look out of his pavilion, borne upon the backs of four elephants, to see a gerfalcon destroy a crane.

The magnificent hunting expeditions of the Indian princes, which had all the parade and much of

the excitement of war, were continued almost to our The Nawaub of Oude, Vizier Ally, or Asoph-ul-Doulah, who was raised to the throne by the assistance of the British government (he died in 1818), was a prince of the most profuse expenditure; and his sports were conducted upon a scale that approached even to the splendours of Kublai Khan or Aurengzebe. He generally took the field in the month of March, accompanied by ten thousand cavalty and as many infantry, and from seven to eight hundred elephants. From forty to sixty thousand people followed the camp, with grain and merchandise. When the vizier set out from his palace at Lucknow, a line was formed with the prince in the centre, mounted on an elephant, with two attendant elephants, one carrying his state howdah, the other his sporting howdah. A line of elephants was prolonged on each side the prince, and was flanked at each extremity by the cavalry, The immense cavalcade proceeded straight through the country, regardless of the mischief that was a necessary consequence, the poor cultivators running after the vizier, crying aloud for mercy. When any game was started, a continued fire was kept up along the line; and if a herd of antelopes was discovered, the elephants halted, and the cavalry hemmed them in, that his highness and his courtiers might leisurely destroy them. Proceeding in this manner by day, and halting in the evening at appointed stations, where every luxury was prepared in sumptuous tents, the army at length approached the Thibet Mountains, where tigers panthers, leopards, and buffaloes were to be found. An encampment being formed, their sporting was

conducted for several weeks upon a grand and formidable scale; and, mounted upon their elephants, the prince and his nobles scoured the country in pursuit of the ferocious beasts that destroyed the flocks and herds of the peasantry. The array of despotism was here of some service; for the number of carnivorous animals that were killed was generally in proportion to the magnitude of the force employed against them.* Such scenes as this, however, belong to another age and system of government than now prevails in British India. The gorgeous power of the native chiefs is gradually vanishing before the quiet strength of the Eutropean conquest and civilization; and the destruction of the tiger and the leopard is left to such individuals as seek the danger for its excitement, or to the hunter by profession, who perils his life for a small reward.

The elephant is invariably employed in India in hunting the tiger. His delicate scent, his strength to make his way through the thickest covers, his sagacity, and especially his great stature, by which the hunter is lifted out of danger, render him peculiarly fitted for such a work. Horses cannot be brought to follow the track of a tiger; and camels are unable to defend themselves if attacked by the ferocious beast. The hunting party is generally numerous, and the sportsmen, seated in their howdahs, fearlessly proceed into the jungle, well-armed for the expected combat.

Occasionally the hunter, with his rifle, is mounted upon an elephant's back. The presence of the

^{*} For a minute description of the huntings of Vizier Ally, see Johnson's Indian Field Sports, chap. ix.

figer is generally made known by the elephants, which, scenting their enemy, become agitated, and make that peculiar trumpeting which indicates their alarm. If the tiger move, many of the elephants become ungovernable; their trunks are thrown up into the air; if they consent to go forward, their cautious steps evince their apprehensions. Those that remain steady under such circumstances are considered particularly valuable. If the motion of an animal through the jungle is perceived, the nearest elephant is halted, and the rider fires in the direction of the waving rushes. The tiger is sometimes wounded by these random shots, and he then generally bounds through the cover to the nearest elephant. Very few elephants can then resist the impulse of their fears. If the trunk, which the animal invariably throws up as far as possible out of reach, should be scratched by the tiger, all command is lost. Mr. Williamson describes an occurrence of this sort, which happened to two gentlemen of the Bengal army. had been in the habit of killing tigers with only one elephant, on which being mounted, they one day roused a tiger of a very fierce disposition. The animal, after doing some mischief among the dogs, which baited him very courageously, at length darted at the elephant's head; and, though foiled in the attempt to get upon it, nevertheless scratched her trunk severely. No sooner did she feel the tiger's claws penetrating her proboscis, than she turned round and set off at full speed, roaring most vehemently. She seemed to have lost her senses. and to be bent on mischief: for wherever she saw a living object, she pursued it, totally heedless of

the mohout's endeavours to guide or restrain her." She was at length, by fatigue and management, brought into a governable state, but she was spoiled for tiger-hunting.

We extract from Mr. Williamson's work an interesting narrative of a remarkable escape, when a tiger sprung upon an elephant, and was destroyed

without injury to the animal or its riders:

"The tiger had satiated himself upon a bullock he had killed, and lay lurking in the grass, which was as high as the backs of the elephants, and very thick, not far from the remains of the bullock. was extremely cunning, and crouched so close as to render it for a long time doubtful whether he was in the jungle or not. The symptoms displayed by the elephants, on approaching the place where he lay concealed, induced the party to persevere in their efforts to rouse him. One gentleman particularly urged his mohout to make his elephant beat the spot where the scent was strongest: which being done, in spite of the tremendous tones of the agitated animal, the tiger, finding himself compelled either to resist or to submit to be trodden upon, sprang upon the elephant's quarter, and so far succeeded as to fix his claws in the pad; his hind legs were somewhat spread, and their claws were fixed into the fleshy membranes of the elephant's thigh. Actuated by the excess of fear, occasioned by so sudden and so painful an attack, the elephant dashed through the cover at a surprising rate; the tiger holding fast by its fore paws, and supported by its hinder ones; unable, however, in consequence of the rapid and irregular motions of the elephant, either to raise himself any higher, or to quit the



gold he had so firmly taken with his claws. The gentleman, who had much ado to keep his seat, was precluded firing at his grim companion, as well from his unprecedented situation as from the great danger of wounding some of the numerous followers, who were exerting the utmost speed of their respective elephants, to come up tohis assistance. The constant desire felt by the elephant to get rid of his unwelcome rider, which produced a waving and irregular pace, gave the opportunity, for those who were mounted on light and speedy animals, to overtake the singular fugi-Another gentleman of the party coming up close, was enabled to choose his position; when, taking a safe aim, he shot the tiger, which fell to the ground and required no farther operations."*

A well-trained elephant has been known to catch the springing tiger upon his tusks. This, however. is a rare accomplishment. If their enemy falls near them, they will instantly kneel upon his body, at the same time transfixing him to the earth. This is partly an effect of instinct and partly of education. They are first familiarized to the appearance of a tiger, by a stuffed skin being thrown in their way, upon which they are taught to trample and kneel. A calf is sometimes put inside the skin; and then the elephant is indeed terrified. Some become so excessively alarmed, that no threats or entreaties will induce them to go near the object of their dread. Others are more courageous; and these, of course, are selected for occasions of real peril. One of the most difficult operations in this course of instruction is to persuade

* Oriental Field Sports, p. 72.

the elephant to bear a dead tiger on his back. Mr. Williamson saw a tiger, which had been insufficiently secured on the back of an elephant, fall off on the way home from the chase; the poor animal was so terrified at the moment, that he resisted every attempt to replace the carcass, and no other elephant in the field would endure the hateful burden.



Dead Tiger.



The elephant has an equal terror of the rhinoce-It appears, from some statements in which Mr. Williamson confided, that if a herd of elephants encounter this formidable animal, they retreat, if possible, without hazarding an encounter. Lally stated to the author of Oriental Field Sports. that he once witnessed, from a distant hill, a most desperate engagement between a large male and a rhinoceros, in which the elephant was worsted and fled.* From the Memoirs of Baber, however, we collect that the terror is mutual. "When we had gone a short way, a man came after us with notice that a rhinoceros had entered a little wood near Bekram, and that they had surrounded the wood and were waiting for us. We immediately proceeded towards the wood at full gallop, and cast a ring round it. Instantly, on our raising the shout, the rhinoceros issued out into the plain and took They followed it for nearly a kos, shot many arrows at it, and finally brought it down. This rhinoceros did not make a good set at any person or any horse. They afterward killed another rhinoceros. I had often amused myself with conjecturing how an elephant and rhinoceros would behave if brought to face each other; on this occasion the elephant-keepers brought out the elephants so that one elephant fell right in with the rhinoceros. As soon as the elephant-drivers put their beasts in motion, the rhinoceros would not come up, but immediately ran off in another direction."f

† Memoirs, p. 292.

^{*} The cut representing an "Elephant attacked by a Rhinocetos," is from Capt. Williamson's work.

CHAPTER VIII.

EMPLOYMENT OF ELEPHANTS IN THE RAST, CONTIN-UED.—EXHIBITIONS OF CRUELTY.—PROCESSIONS AND CEREMONIALS.

The delight in brutal sports which, in all ages and in all countries, has been felt by the multitude—that is, by the high as well as the low vulgar—is too universal to be ascribed to particular conditions of social refinement. Sound knowledge, leading the mind to despise the coarse excitements of unintellectual curiosity, and genuine religion, which teaches us

"Never to blend our pleasure or our pride With sorrow of the meanest thing that feels,"

must indeed greatly diminish the popular tendency towards such gratifications. Nevertheless, among all nations, that rude exercise of instinctive tyranny, which makes the schoolboy torment a chafer, and the ferocious "children of a larger growth" assemble to witness the sufferings of a bear or a badger, still displays itself in a thousand forms of cruelty, in spite of the control of education, the chastisements of law, or the power of public opinion. In tracing the history of particular quadrupeds, it will be necessary to exhibit the infinitely various modes in which a perwerse ingenuity has compelled them to administer a barbarous pleasure to the cruel propensities of man. Such inquiries are painful R 2

and revolting, but they cannot be omitted; for they show, perhaps more forcibly than any other instances, how the sense of right and wrong is deadened by custom: and how, therefore, by the evil power of example, and the nourishment of a heartless sophistry, the most exalted in rank among refined nations-magistrates, statesmen, and even women. whose principal attributes should be delicacy and tenderness-have not only come to look upon public exhibitions of cruelty without abhorrence, but absolutely to rejoice and feel proud in witnessing the fierce contests of animals whose passions have been artificially excited; to be critical in their observance of the prowess of the contending victims; to mark with rapture the glazing eye and the quivering limb of the weaker in the fight; and to shout over the agonies of exhausted nature, with the glory of the savage that has sated his vengence upon his enemy at the stake.

The elephant, although the mildest and most incoffensive of quadrupeds, has always been a sufferer from this propensity of man to cruel sports. In India, elephants are to this day baited; and the native chiefs and nobles attach great importance to these displays. When Bishop Heber was at the court of Baroda, "The raja," he says, "was anxious to know whether I had observed his rhinoceros and his hunting tigers, and offered to show me a day's sport with the last, or to bait an elephant for me; a cruel amusement which is here not uncommon..., I do not think he understood my motive for declining to be present. A Mussulman, however, who sat near him, seemed pleased by my refusal, said it was very good, and asked me if

any of the English clergy attended such sports. I said it was a maxim with most of us to do no harm. to any creature needlessly: which was, he said, the doctrine of their learned men also."* At the palace of Jyepoor, says the same humane person, "we were shown five or six elephants in training for a fight. Each was separately kept in a small paved court, with a little litter, but very dirty. They were all what is called 'must,' that is, fed on stimulating substances to make them furious; and all showed in their eyes, their gaping mouths, and the constant motion of their trunks, signs of fever and restlessness. Their mohouts seemed to approach them with great caution; and on hearing a step they turned round as far as their chains would allow, and lashed fiercely with their trunks. I was moved and disgusted at the sight of so noble creatures, thus maddened and diseased by the absurd cruelty of man, in order that they might for his diversion inflict fresh pain and injuries on each other."+ the combats of elephants, according to Mr. Crawfurd, "after a rencounter, which does not last above a few seconds, one of the parties is sure to run away." At Ava, the elephants, bearing riders, are fought across a stout paling. They are brought up to the charge with much spirit, but often refuse to engage. They have but one mode of fighting; they butt with the forehead, and endeavour to wound each other with their tusks. The following account of an elephant fight is from Bernier:

"The festivals generally conclude with an amusement unknown in Europe; a combat between two elephants, which takes place in the presence of all

^{*} Journal, vol. iii., p. 11. † Ibid., vol. ii., p. 406.

the people, on the sandy space near the river; the king, the principal ladies of the court, and the omnahs, viewing the spectacle from different apartments in the fortress.

"A wall of earth is raised three or four French feet wide, and five or six high. The two ponderous beasts meet one another face to face, on opposite sides of the wall, each having a couple of riders, that the place of the man who sits on the shoulders, for the purpose of guiding the elephant with a large book, may be immediately supplied if he should be thrown down. The riders animate the elephants either by soothing words, or by chiding them as cowards, and urge them on with their heels, until the poor creatures approach the wall and are brought to the attack. The shock is tremendous, and it appears surprising that they ever survive the dreadful wounds and blows inflicted with their teeth, their heads, and their trunks. are frequent pauses during the fight; it is suspend. ed and renewed; and the mud wall being at length thrown down, the stronger or more courageous elephant passes on and attacks his opponent, and, putting him to flight, pursues and fastens upon him with so much obstinacy, that the animals can be separated only by means of cherkys, or fireworks, which are made to explode between them; for they are naturally timid, and have a particular dread of fire, which is the reason why elephants have been used with so very little advantage in armies since the . The boldest come from Ceylon, use of firearms. but none are employed in war which have not been regularly trained, and accustomed for years to the discharge of muskets close to their heads, and the bursting of crackers between their legs.

"The fight of these noble creatures is attended with much cruelty. It frequently happens that some of the riders are trodden under foot and killed on the spot, the elephant having always cunning enough to feel the importance of dismounting the rider of his adversary, whom he therefore endeavours to strike down with his trunk. So imminent is the danger considered, that on the day of combat the unhappy men take the same formal leave of their wives and children as if condemned to They are somewhat consoled by the reflection, that if their lives should be preserved, and the king be pleased with their conduct, not only will their pay be augmented, but a sack of peyssas (equal to fifty francs) will be presented to them the moment they alight from the elephant. have also the satisfaction of knowing that, in the event of their death, the pay will be continued to the widows, and that their sons will be appointed to the same situation. The mischief with which this amusement is attended does not always terminate with the death of the rider: it often happens that some of the spectators are knocked down and trampled upon by the elephants or by the crowd: for the rush is terrible when, to avoid the infuriated combatants, men and horses in confusion take to The second time I witnessed this exhibition, I owed my safety to the goodness of my horse and the exertions of my two servants."*

The barbarous sports of the amphitheatre appear to have furnished the chief amusements of the luxurious princes of the Mogul'empire. About the middle of the seventeenth century, "the daily

* Travels, vol. i., p. 314.



Elephant killing a horse.

diversions of the Mogul, except on Fridays, were to see the lions, leonards, tigers, and elephants fight with each other."* These exhibitions were varied in every mode that an ingenious cruelty could de-"Some elephants," says Covert, "fight with wild horses, six horses to an elephant, which he kills with clasping his trunk about their necks. and. pulling them to him, breaks their necks with his It is not uncommon to fight elephants with tigers. The accounts of the courage displayed by the elephant on these occasions are somewhat contradictory. At Saigon, in Cochin China, a combat of this nature was exhibited before Mr. Crawfurd, where the tiger was muzzled and his claws torn out, and yet the first elephant was wounded and put to flight. The tiger was at length killed by successive tosses upon the tusks of his adversacies; and, when he was perfectly dead an elephant seized the carcass with his proboscis, and threw it to a distance of thirty feet, Father Tachard, on the contrary, saw a similar fight at Siam, in which the tiger was wounded and driven away upon the first onset. These differences in conduct doubtless arise, in some degree, from the differences in the tempers of the individual ani-At the lion-fight at Warwick, one lion played with the dogs that attacked him, while the other destroyed them in an instant. Different degrees of training may also produce considerable varieties of behaviour in the elephant when he encounters an enemy. A strange terror is always the most formidable to him. "An English dog: seized an elephant by the trunk, and kept his hold * Albert de Mandelelos's Travels.

so fast, that the elephant, having tossed him in the air for some time, at last swung him off, but did not care to come near him a second time. This being told to the Mogul, enhanced the reputation of the English dogs; they were carried about in palankines along with his majesty; and he fed them himself with a pair of silver tongs made for that purpose."* Pliny tells us of two remarkable dogs that were given by the King of Albania to Alexander the Great (Strabo says they were Indian dogs), one of which vanquished a lion and afterward an elephant. According to the naturalist, the dog was most alarmed at the largest enemy. His hair stood up, he barked in a fearful manner, but at length rushed at the enormous animal, attacking him on every side, and fairly wearing him out by the rapidity of his assaults. The elephant at length fell exhausted on the ground.

It is unnecessary to offer any farther instances of the depraved taste which excites a generous and docile animal to such encounters; nor shall we discuss whether he possesses a courageous temper, because he often shrinks from contests which are evidently revolting to his nature. The elephant is a peaceful animal; his strength enables him to defend himself against ordinary enemies, but he has no disposition to attack. The reason is evident. He subsists upon vegetable food, and therefore he has neither the desire to destroy life which belongs to the carnivorous animals; nor the means of gratifying such a desire. The cruelty which forces him into such combats is, for this reason, greater than that which excites animals to fight that are natu-

^{*} Barclay, Universal Traveller.

rally pugnacious; but, in either case, the principle

of brutality is the same.

It is agreeable to turn from scenes which are hateful to the quadruped, to behold him engaged in peaceful pageants which afford him gratification. Associated with human slaves in administering to the pomp of Asiatic despotism, the elephant is not only reconciled to captivity, but is proud and satisfied. He is pampered and caressed; he has little labour to perform; his chains are gilded. He serves a tyrant, but he does not feel the tyranny; and he is happier than the nabob whom he carries, for he has no dread of the power which obeys no law but its own caprice, when it raises to a throne

or degrades to a dungeon.

In British India the elephant is rarely seen upon. occasions of ceremony, except at the courts of those native princes who still possess any independent authority. In the hideous ceremonials of Juggernaut elephants are used. Five elephants precede the car of the idol, "bearing towering flags, dressed in crimson caparisons, and having bells hanging to their caparison."* When the Lord Cornwallis, "they were each mounted on an elephant, richly caparisoned, and seated in a silver howdah."† At Vizier Ally's wedding in 1795, "the procession was grand beyond conception; it consisted of about twelve hundred elephants, richly caparisoned, drawn up in a regular. line, like a regiment of soldiers. About one hundred elephants in the centre had howdahs, or castles covered with silver: in the midst of these ap-* Buchanan. † Mill's British India, book vi., chap. 4.

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peared the nabob, mounted on an uncommonly large elephant, within a howdah covered with gold. richly set with precious stones." It was a custom with the Moguls to have their elephants and horses daily paraded before them. Bernier has described this ceremony at the court of Aureng. zebe, and Sir Thomas Rowe at that of Jehanghir. "His greatest elephants were brought before him, some of which, being lord elephants, had their chains, bells, and furniture of gold and silver, attended with gilt banners and flags; and eight or en elephants waiting on him, clothed in gold, silk, and silver. Thus passed about twelve companies. most richly furnished; the first elephant having all the plates on his head and breast set with rubies and emeralds, being a beast of wonderful stature and beauty: They all bowed down before the king."† Bernier has explained the machinery which produces this reverence of the elephants for their mighty master. "When in front of the throne. the driver, who is seated on his shoulder, pricks him with a pointed iron, animates and speaks to him, until the animal bends one knee, lifts his trunk on high, and roars aloud."I

The elephant in India has usually been the minister of despotic justice. The Emperor Akbar, says Purchas, "on Tuesday, sits in judgment, and hears both parties with patience. He sometimes sees, with too much delight in blood, the executions done by his elephants." Shah-Jehan terrified the Portuguese residents at Hoogly by the daily threat of throwing them under the elephants' feet, unless

Annual Biography and Obituary for 1819.

[†] Purchas. † Travels, i., 298.

they would renounce the Christian faith.* Knox. in his account of Ceylon, says, "The king makes use of them as executioners; they will run their teeth through the body, and then tear it in pieces. and throw it limb from limb. They have sharp iron spikes, with a socket with three edges, which they put on their teeth at such times: for the elephants that are kept have all the ends of their teeth cut to make them grow the better, and they do grow out again." The custom was kept up at Ceylon till the English conquest of that island. Bishop Heber says, "I preached, administered the sacrament, and confirmed twenty-six young people in the audience-hall of the late king of Candy, which now serves as a church. Here, twelve years ago, this man, who was a dreadful tyrant, and lost his throne in consequence of a large party of his subjects applying to General Brownrigge for protection, used, as we are told, to sit in state to see those whom he had condemned trodden to death, and tortured by elephants trained for the purpose." Whatever be the faults of the English government in India, it is cheering to know that, through the, greatest portion of that vast country, the decrees of an equal law are substituted for the will of tyrants, the best even of whom may be described, in the forcible language of Knox, as one who "sheds a great deal of blood, and gives no reason for it."

"When the king of Siam goes to court," says. Tavernier, "he has a train of two hundred elephants, among which one is white." His majesty of Siam, who is described in his official titles as "a king who

* * Bernier, vol. i., p. 198. -

has all emperors, kings, princes, and sovereigns in the whole world, from the rising to the going down of the sun, under subjection," doubtless derives this wonderful power from his elephant possessions. The same titles exhibit him as "a king that hath elephants with four teeth, red, purple and pied; elephants, ay, and a Byytenaques elephant, for which God hath given him many and divers sort of apparel, wrought with most fine gold, ennobled with many precious stones; and, besides these, so many elephants used in battle, having harnesses of iron, their teeth tipped with steel, and their harnesses laid over with shining brass." But the greatest dignity of this illustrious monarch is that he is "king of the white elephant, which elephant is the king of elephants, before whom many thousands of other elephants must bow and fall upon their knees. The white elephant, for the possession of which there was perpetual war between the kings of Siam and Pegu, and Aracan, in the sixteenth century—for which five kings lost their lives, and many thousands of their subjects were slaughtered—is an Albino, that is, an animal made white by disease. elephants, though extremely rare, were known to the ancients. Horace mentions the white elephant in his Epistles. Democritus would laugh at the populace.

> "Whether a beast of mix'd and monstrous birth Bids them with gaping admiration gaze, Or a white elephant their wonder raise."

Francis.

The commentators explain the passage by stating

^{*} Struys' Travels; quoted in the Notes to Southey's Curse of Kehama.

that it was customary to exhibit to the people a camelopard or a white elephant. Ælian speaks of one whose mother was black. They are often mentioned in Oriental history. Mahmoud, in the eleventh century, had a white elephant, and, when mounted upon that animal during an engagement, he esteemed it as a certain pledge of victory. Travellers in the East have constantly observed the white elephants of the princes of India beyond the Ganges. The following account is by the Englishman Fitch.

"Within the first gate of the palace is a very large court, on both sides of which are the houses for the king's elephants, which are wonderfully large and handsome, and are trained for war and for the king's service. Among the rest, he has four white elephants, which are so great a rarity, no other king having any but he; and, were any other king to have any, he would send for it, and if refused. would go to war for it, and would rather lose a great part of his kingdom than not have the elephant. When any white elephant is brought to the king, all the merchants in the city are commanded to go and visit him, on which occasion each individual makes a present of half a ducat, which amounts to a good round sum, as there are a vast many merchants, after which present you may go and see them at your pleasure, although they stand in the king's house. Among his titles, the king takes that of king of the white elephants. do great honour and service to these white elephants, every one of them baving a house, with gold, and getting their food in vessels of gilt silver. Every day, when they go to the river to wash, each goes under a canopy of cloth of gold or silk, carried by

six or eight men, and eight or ten men go before each, playing on drums, shawns, and other instruments. When each has washed and is come out of the river, he has a gentleman to wash his feet in a silver basin, which office is appointed by the king. There is no such account made of the black elephants, be they never so great, and some of them are wonderfully large and handsome, some being

nine cubits high."

"Some tell of this white elephant," says Purchas "(for so they speak as if there were but one; whereas Fitz-Balli and Frederike saw four, but it seems one was of principal estimation), that it was observed with no less honour than the king, and came not abroad without great pomp. It had been a dismal and disastrous beast to five or six kings." Tachard, who saw at Siam this individual white elephant who had been the occasion of so much bloodshed, says that he was small and very old -they said three hundred years. He was attended by a hundred men, who fed him out of vessels of gold, and he lived in a splendid pavilion. elephant being well stricken in years, the King of Siam had looked out for a successor; and a young one, which had been presented to him by a neighbouring potentate, was kept at his country palace with the same care and splendour."*

In Major Snodgrass's Narrative of the recent Burmese war, it is stated that the government of the Birman empire was "so completely influenced and guided by signs and omens, that an unusual grunt from the white elephant was at all times sufficient to interrupt the most important affairs,

* Hist. Gen. des Voyages.

and cause the most solemn engagements to be broken off." The white elephant, in this particular, retained his ancient influence; but Mr. Crawfurd thinks that the veneration paid to this pampered idol of pride and superstition has been much exaggerated. His account of the present condition of the white elephant of Ava is very interesting:

"Some of the elephants were very noble animals; but our attention was chiefly attracted by the celebrated white elephant, which was immediately in front of the palabe; it is the only one in the possession of the King of Ava, notwithstanding his titles: whereas his majesty of Siam had six when I was in that country. The Birman white elephant was rather of a cream than a white colour, and by no means so complete an Albino as any one of those shown to us in Siam. To the best of my recollection, however, it was larger than any of the latter: it had no appearance of disease or debility; and the keepers assured us that its constitution was equally good with that of any of the common elephants.

"I had there an opportunity, as well as in Siam, of ascertaining that the veneration paid to the white elephant has been, in some respects, greatly exaggerated. The white elephant is not an object of worship, but it is considered an indispensable part of the regalia of sovereignty. Royalty is incomplete without it; and the more there are, the more perfect is the state of the kingly office considered. Both the court and people would consider it as peculiarly inauspicious to wanf a white elephant; and hence the repute in which they are held, and the anxiey to obtain them: the capture of a white

elephant is consequently highly rewarded. The present one was first discovered by four common villagers, each of whom received two thousand five hundred ticals in money, and offices, titles, and estates.

*While we were at Ava, a report was brought that a white elephant had been seen; but it was stated, at the same time, that its capture and transport on a sledge over the cultivated country would be accompanied by the destruction of ten thousand baskets of rice. His majesty is said to have exclaimed, more with the enhusiasm of an amateur than the consideration of a patriot king, 'What signifies the destruction of ten thousand baskets of rice, in comparison with the possession of a white elephant?' and the order was given for the hunt.

"The lower orders, however, it must be observed, perform the shiko, or obedience of submission to the white elephant; but the chiefs view this as a vulgar superstition, and do not follow it. When the present elephant was taken, the event was considered a joyous one; and the late king, who was fond of money, taking advantage of the circumstance, issued an order to the tributaries and chiefs to ask pardon of the white elephant (Ka dau), accompanied, of course, by the usual presents, which his majesty deposited in his coffers.

"The establishment of the white elephant is very large; he has his wun, or minister; his wun, dduk, or deputy to that officer; his sare-gyi, or secretary, &c., with a considerable endowment of land for his maintenance. In the late reign, Sa-len, one of the finest districts in the kingdom, was the estate of the white elephant."

Crawfurd's Embassy to the Court of Ava, p. 142.

The veneration which, in the Birman empire, is paid to the white elephant, is in some degree connected with the doctrine of the Metempsychosis. Xaca sustained seventy thousand transmigrations through various animals, and rested in the white elephant.* The general superstitions respecting the quadruped which, more or less, prevail throughout Asia, have doubtless had some additional influence upon this particular homage. These superstitions have reference to the elephant's great stature and his character for sagacity. The Hindoo mythology teaches that the earth is supported by eight elephants. Bernier witnessed a curious dialogue between an aga at the court of Delhi, and a Pundit Brahmin, in which the latter, with the nauseous flattery that pervades all ranks in India, concluded a harangue with these words: "When, my lord, you place your foot in the stirrup, marching at the head of your cavalry, the earth trembles under your footsteps; the eight elephants, on whose heads it is borne, finding it impossible to support the extraordinary pressure."† In the Ramayuna, one of the most celebrated of the sacred books of the Brah. mins, we have a long description of a party of men. who, having penetrated into the interior of the earth, had a very satisfactory audience of these eight potentates. "The sixty thousand descended to Patala, and there renewed their digging. There, oh chief of men, they saw the elephant of that quarter of the globe, in size resembling a mountain, with distorted eyes, supporting with his head this earth, with its mountains and forests, covered with vari-

^{*} Kircher; China Illustrated, chap. iv. † Travels, vol. i., p. 302.

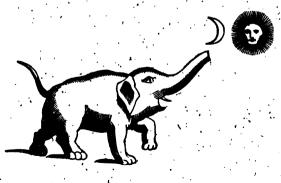
ous countries and adorned with numerous cities. When, for the sake of rest, oh Kakootstha! the great elephant, through distress, refreshes himself by moving his head, an earthquake is produced. Having respectfully circumambulated this mighty elephant, guardian of the quarter, they, oh Rama! fearing him, penetrated into Patala. After they had thus penetrated the east quarter, they opened. their way to the south. Here they saw that great elephant Muhapudma, equal to a huge mountain, sustaining the earth with his head. Beholding him, they were filled with surprise; and after the usual circumambulation, the sixty thousand sons of the great Sugura perforated the west quarter. these mighty ones saw the elephant Soumanuca. of equal size. Having respectfully saluted him, and inquired respecting his health, these valiant men, digging, arrived at the north. In this quarter, oh chief of Ruzhoo! they saw the snow white elephant Bhudra, supporting this earth with his beautiful body."* The remainder of the passage details the visits to the other four elephants, in a similar strain.

But the sagacity of the elephant, as well as his strength, has formed a prominent part of the fanciful mythology of the Hindoos. Ganesea, the God of Wisdom, is represented in the temples throughout India with a human body and an elephant's head.

The Persians have a festival, according to Chardin, to commemorate the wonderful sagacity, or, rather, inspiration of an elephant, when Abraha, a prince of Yemen, marched an army to destroy the Kaaba of Mecca, the sacred oratory which Abraham

* Notes to Southey's Curse of Kehama.

built in that city. Before the birth of Mohammed the Arabians reckoned from this epoch, which they called the year of the coming of the elephants. Sale's version of this story is amusing. Meccans, at the approach of so considerable a host, retired to the neighbouring mountains, being unable to defend their city or temple. But God himself undertook the defence of both. For when Abraha drew near to Mecca, and would have entered it. the elephant on which he rode, which was a very large one, and named Mahmud, refused to advance any nigher to the town, but khelt down whenever they endeavoured to force him that way, though he would rise and march briskly enough if they turned him towards any other quarter; and while matters were in this posture, on a sudden a large flock of birds, like swallows, came flying from the seacoast, every one of which carried three stones, one in each foot, and one in its bill; and these stones they threw down upon the heads of Abraha's men, certainly



Italing every one thay struck." The notion that the elephant was a religious animal has been very general, not only in the East, but among the enlightened nations of antiquity. In Kircher's description of China there is a plate of an elephant worshipping the sun and moon, copied from one of the sacred pictures of the Chinese, which is given on the preceding page.

Cardinal Zabarella caused a coin to be struck, representing the pretended religion of the elephant. All these superstitions have evidently grown out of an 'exaggerated notion of the animal's sagacity; and they have been spread among mankind by that love of the marvellous which always accompanies a very small degree of knowledge.

CHAPTER IX.

EMPLOYMENT OF ELEPHANTS IN THE WARS OF MODERN ASIA.

THE horse, the camel, and the elephant, are each intimately connected with the history of mankind. The use of the first is unquestionably the most universal. In every stage of civilization in which the animal has been known, has he been found of the most paramount utility. In peace or in war, for luxury or for necessity, with the Arab of the desert or the European of the town, are his services

Sale's Koran, vol. ii., p. 510.

equally required. He was as necessary to the outfit of armies, when "the light-armed troops" of the Parthian city,

"Flying, behind them shot Sharp sleet of arrowy showers against the face Of their pursuers, and o'ercame by flight,"*

as at the last mighty battle that exhibited the fierce and foolish hatred of the most refined nations of , the world. The employment of the camel is limited to particular regions, where his strength and his powers of endurance supply the only link by which nations separated by nature are enabled to interchange the products which are essential to their common welfare. The elephant of the present day holds an inferior rank in the scale of usefulness to either the horse or the camel. He is valuable, but not indispensable. But there was a long period in the history of the Asiatic nations, and a briefer one in that of the Greeks and Romans, when elephants not only administered to the pomp and luxurious courts, and offered the most essential services in the operations of commerce, but were as much an "arm of war" as the artillery of modern Europe, "which is, as it were, in their stead in a day of battle."† The tactics of modern times have necessarily dispensed with the services in the field of an animal that, however powerful in . an attack upon dense masses of half-disciplined. troops, armed only with the cimeter and the spear, became unmanageable when he was assailed by musketry, and, in his terror of firearms, spread destruction equally among friends and enemies. We shall trace the elephant through his present

^{*} Paradise Regained. † Montargne, book ii., c. 12.

partial employment in an Indian army, to the times when he constituted much of the strength of the Moguls; and then proceed to his history in those more remote periods when he was associated with the destinies of the mightiest empires of antiquity.

The elephants of an Anglo-Indian army of the present day are principally used to carry the heavy tents. A camp in Asia is very differently arranged to one in Europe. The quantity of baggage which accompanies even a small number of fight. ing men is enormous. Every supply that may be required during a campaign is carried with the The animals employed in this service are camels, bullocks, and elephants. When it is considered that every officer is attended by a considerable number of servants; that the camp is followed by dealers in every commodity, who extract large profits out of the necessities or vanities of the Europeans; and that the retinue of the commander is (or at least was, till very recently) upon the same scale of splendour as that of the native princes, the number of animals required to administer to all these real and artificial wants must be enormous. When the Marquis of Cornwallis took the field, during the war with Tippoo, his followers amounted, it is said, to near half a million.

Such a train appears, to a certain extent, essential to an Asiatic army. This circumstance will account for the hostile swarms which Xerxes brought into Greece; and, without any disparagement of the valour which triumphed at Thermopyles, our wonder at the defeat of several millions by a few thousands will be greatly diminished, when we consider that a very large proportion of those

millions were just such a cavalcade as followed Aurengzebe on his march from Delhi, and that the thousands were hardy warriors, unencumbered with any useless throngs of servants, and therefore moving to victory with rapidity and compactness. The subject of the mode in which an Asiatic camp is composed, is curious in many points of view; and we therefore willingly extract a passage, in illustration, from the amusing Memoirs of Lieutenant Shinn:

"My post of baggage-master being a situation which is, I believe, peculiar to India, it may not be improper to state its duties. He is a staff-officer. and when not employed in his particular department, is attached to the suite of the commander of the division, as, much as the commissary-general. quartermaster general, or any other staff-officer. of the division. On the line of march, he is held entirely responsible that neither men nor baggage precede the column of march, and that they are on their proper flank, which is regulated by the general orders of the day. If the reader recollect what I before stated, that he may safely calculate ten followers in a Bengal army to' every fighting man; and when he is informed that, according to calculations made in our camp, including the several native contingencies we had with us, our followers were not less in number than eighty thousand, men, women, and children, some thirty thousand following the army for what they could pick up. by fair means or otherwise, my situation cannot be supposed to have been a sinecure. truly one of great labour and activity. I had' twenty men belonging to a corps of local horse.

These men were provided with whips, and placed at-my disposal. To attempt to talk the number-less camp-followers into obedience was quite out of the question; and, therefore, these whips were for the purpose of lashing them into something like discipline. To the great number of human beings I have spoken of must be added fifty elephants, six hundred camels, five thousand bullocks, five thousand horses, one thousand ponies, two hundred goats, two hundred sheep, fifty ruts, one hundred palanquins, one hundred dogs, and one hundred hackeries or carts, presenting the following total:

			1			
Fighting-men	. •		٠		•	. 8000
Camp-followers		•	٠, ٢	,	•	. 80,000
Elephants .	•	•	•	•	•	50
Camels	•	. •	٠.,	` •	• .	. 600
Bullocks, horse	es, and	tatt	900	•	• '	11,000
Goata, sheep, a	ınd do	gs	•	. •	•	. 500
Palanquina, ha	ckerie	s, an	d rute	١.	. • .	. 250
	•	٠.				-
				•		100,400.**

According to this statement, which is confirmed by other narratives of recent wars in India, fiftyelephants are attached to eight thousand fighting This is a small number when compared with the immense train of camels, bullocks, and horses; but it is sufficient for the purposes of modern warfare. The elephant consuming a vast quantity of forage, and requiring great care to keep him in good travelling condition, it is not employed in services where other animals, less expensive to maintain and of less commercial value, would be equally useful. But there are peculiar circumstances in the march of an Indian army, where the elephant is indispensable. These we shall briefly describè.

* Shipp's Memoirs, vol. ii., p. 256-258

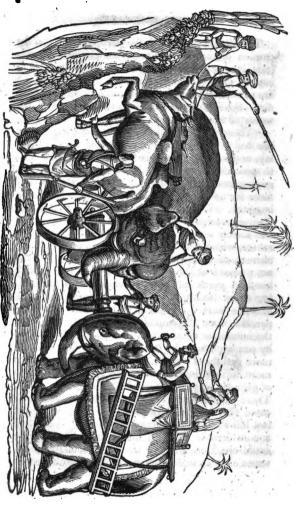
· The progress of an army through a country intersected with good roads is direct and speedy. In the newly-acquired territories of India, remote from European settlements, thick jungles, extensive bogs, and precipitous mountains offer impediments to an invader which only the most undaunted perseverance could overcome. In such situations, the power of the elephant is called into action. In a "Narrative of the late Burmese War," the writer says. "the road lay partly through a thick jungle; but, with the aid of three elephants, a passage was forced." Here the strength which the animal ordinarily employs in a state of nature was called into exercise. The impediment which pioneers could not remove without great labour and consequent delay, the three elephants speedily overcame. The high grass was trampled under their feet, the thick bushes yielded to their prodigious weight, the slender trees were broken off at the stems, the path was open for troops to follow.

But the best roads are sometimes suddenly broken up by violent rains; and then they present a succession of deep ravines, with clayey banks, on which bullocks have a very insecure footing. The artillery cannot pass without the aid of the elephant. To every battering-train, a few of these animals are attached. They "always apply their strength in the most efficacious manner, either in pushing forward the guns with their foreheads, or lifting them up with their trunks when the wheels have sunk into a deep rut or slough."* Captain Williamson has more fully described their services in this particular: "Many of our most arduous military oper-

* Twelve Years' Military Adventure.

ations have been greatly indebted for their success to the sagacity, patience, and exertion of elephants. Exclusive of their utility in carrying baggage and stores, considerable aid is frequently supplied by the judgment they display, bordering very closely When cannon require to be extricated from sloughs, the elephant, placing his forehead to the muzzle, which, when limbered, is the rear of the piece, with an energy scarcely to be conceived. will . urge it through a bog from which hundreds of oxen or horses could not drag it: at other times, lapping his trunk round the cannon, he will lift while the cattle and men pull forward. The native princes attach an elephant to each cannon, to aid its progress in emergencies. For this purpose the animal is furnished with a thick leather pad, covering the forehead, to prevent its being injured. It has sometimes happened that, in narrow roads or causeways, or on banks, the soil has given way under heavy cannon; when an elephant, being applied to the falling side, has not only prevented the piece from upsetting, but even aided it forward to a state of security."* Elephants have probably been employed in this manner from the first introduction of artillery into Asia. Bernier, describing the army of Aurengzebe, says, "Many of these cannon are so ponderous, that twenty yoke of oxen are necessary to draw them along; and some, when the road is steep or rugged, require the aid of elephants, in addition to the oxen, to push the carriage wheels with their heads and trunks." Heavy guns are often carried on elephants, backs, both in the native and the Indian armies.

^{*} Oriental Field Sports, p. 43. † Travels, ii., 88.



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The situation in which the perseverance and the caution of the elephant are most displayed in military operations, is that in which he is required to convey guns up the steep passes, or ghauts, which are so formidable in the mountainous districts of India. Such a scene will be best described in the

words of an eyewitness:

"There was a small ravine, branching off from the bed of a dry river, in which our encampment lay, and its entrance looked like the dreary access to some deep cavern. * * * * We entered this little gaping cavern, leaving the principal part of our force for the protection of our standing tents and We were equipped as lightly as possible. Two six pounders were conveyed on elephants, and our march seemed to lie through the bed of this ravine, which was rocky, and watered by a crystal current, that rippled along its flinty bed. We did not proceed at the rate of more than one or two hundred yards an hour, ascending and descending every twenty paces; at one time, deep sunk in some dark excavation, and shortly afterward perched upon the summit of a rock, the falling of the numerous cataracts drowning the noise made by our approach. * * * * Our march now became more and more tardy, and the ascents and descents more difficult and intricate. In some places rocks of gigantic size hung some hundred feet overhead. These sudden and tremendous hills and dales indicated that we could not have far to go; for the last hill was scarcely accessible. * * * * We halted a considerable time, till broad daylight, when we could see, from where I stood, the soldiers in advance of us ascending by means of projecting rocks

and houghs. We were halted in a kind of basin. surrounded by high hills. In the course of a couple of hours the whole of the 87th regiment, with our gallant general and suite, ascended this difficult ghaut. From this eminence we could see a great distance: and on every hill we could discern signals, which were communicated from post to post. * What will not good examples effect on the minds of soldiers? Our general walked every yard of this critical march, encouraging his men. These well-timed examples will accomplish won-The question now was, how to get the guns up, and the powder and shot; but those who are accustomed to wars in India are not often at a loss for expedients. Having got all the men up excent the rear guard, the pioneers went to work with their pickaxes, some making a road and others felling trees. As we were but two regiments, the general's primary object was to place our little force to the best advantage. This accomplished. the guns were our next object. Having cut a good deal of the most prominent part of the hill away, and lain trees on the ascent as a footing for the elephants, these animals were made to approach it, which the first did with some reluctance and fear. He looked up, shook his head, and, when forced by his driver, roared piteously. There can be no question, in my opinion, that this sagacious animal was competent instinctively to judge of the practicability of the artificial flight of steps thus constructed; for the moment some little alteration had been made, he seemed willing to approach. He then commenced his examination and scrutiny, by pressing with his trunk the trees that:

had been thrown across; and after this he put his fore-leg on with great caution, raising the fore-part of his body so as to throw its weight on the tree. This done, he seemed satisfied as to its stability. The next step for him to ascend by was a projecting rock which we could not remove. Here the same sagacious examinations took place, the elephant keeping his flat side close to the side of the bank, and leaning against it. The next step was against a tree; but this, on the first pressure of his trunk, he did not like. Here his driver made use of the most endearing epithets, such as, 'Wonderful, my' life,' Well done, my dear,' My dove,' My son,' My wife; but all these endearing appellations, of which elephants are so fond, would not induce him to try again. Force was at length resorted to, and the elephant roared terrifically, but would not move. Something was then removed; he seemed satisfied, as before: and he in time ascended the stupendous ghaut. On his reaching the top, his delight was visible in a most eminent degree; he caressed his keepers, and threw the dirt about in a most playful manner. Another elephant, a much younger animal, was now to follow. He had watched the ascent of the other with the most intense interest, making motions all the while, as though he was assisting him by shouldering him up the acclivity; such gestures as I have seen some men make when spectators of gymnastic exercises. When he saw his comrade up, he evinced his pleasure by giving a-salute something like the sound of a trumpet. When called upon to take his turn, however, he seemed, much alarmed, and would not act at all without force. When he was two steps up, he

slipped, but recovered himself by digging his toes in the earth. With the exception of this little accident, he ascended exceedingly well. When this elephant was near the top, the other, who had already performed his task, extended his trunk to the assistance of his brother in distress, round which the younger animal entwined his, and thus reached the summit of the ghaut in safety. Having both accomplished their task, their greeting was as cordial as if they had been long separated from each other, and had just escaped from some perilous achievement. They mutually embraced each other. and stood face to face for a considerable time, as if whispering congratulations. Their driver then made them salam to the general, who ordered them five rupees each for sweetmeats. On this reward of their merit being ordered, they immediately returned thanks by another salam."*

In the British armies in India the elephant is not brought into the field of battle; but by a few of the Native Powers, the farthest removed from European influences, he is still used as an "arm of war." The historian of the Burmese War says, "The garrison (Burmans) sallied in considerable force, infantry and cavalry, with seventeen war elephants, fully caparisoned, and carrying a proportion of armed men. This attack was, as usual, directed upon our right; and while the flotilla came up in full sail, under all the fire of the fort, the cavalry, covered by the horse-artillery, was ordered to charge the advancing monsters: the scene was novel and interesting; and although neither the elephants nor their riders can ever be very formid.

^{*} Shipp's Messoirs, vol. ii., p. 64 to 72.

able in modern warfare, they stood the charge with a steadiness and courage these animals can be rarely brought to show. Their riders were mostly shot; and no sooner did the elephants feel themselves unrestrained by the hand of their drivers, than they walked back to the fort with the greatest composure."*

In the narratives of the wars of the last half century, between the British in India and the native chiefs, we find very rare mention of elephants in The rapid movements of European troops, the precision of their fire, and the fury of their charge, had taught the princes of India not to trust to a force which was better adapted to those contests among themselves, when elephant was opposed -to elephant, and their riders fought with javelins and swords, like knights of the ancient tournament. But in the war of Coromandel about eighty years ago, when the British power in India, fighting its way from small beginnings to the possession of the empire, had to contend against many of the native chiefs, equipped for war in the same style as the old Mogul emperors, elephants were frequently encountered in battle. The Nabob of Arcot and his rival Chunda-saheb were each mounted on elephants, in the fight which appeared to secure the Carnatic to the influence of France. The nabob, "on an elephant, was surrounded, according to the Indian military array, by the chosen cavalry of his army. * * He perceived the elephant of Chunda-saheb, and knew the ensigns of his rival. More than one passion was now excited; and the nabob, furious by the sight of the author of this calamitous day,

† Narrative of the Burmese War, p. 170.

ordered the conductor of his elephant, with the promise of a great reward, to push directly against the elephant of Chunda-saheb. A part of the French battalion was in the way; they fired; a shot from. the musket of a Caffre went through the nabob's heart, and he fell from his elephant dead on the plain."* Nazir-jing, a son of the Mogul, entered the Carnatic after this event with three hundred thousand men, eight hundred pieces of cannon, and thirteen hundred elephants.† He was himself shot upon his elephant by a fusileer who rode upon the same elephant as his enemy the Nabob of Cudapa. † The nabob of Cudapa perished in the great battle with Murzafa-jing, the Soubah of the Carnatic, and that prince also fell on the same day, in close contest "Murzafa-jing came up with with one of his rivals. the Nabob of Canoul, who, finding he could not escape, turned with the handful of troops which surrounded him, and pushed on towards the elephant of his enemy. Exasperated by this defiance, the young prince made a sign to his troops to leave the person of the nabob to be attacked by himself. two elephants were driven up close to each other. and Murzafa-jing had his sword uplifted to strike, when his antagonist thrust his javelin, which pierced his forehead with so much force that the point entered the brain; he fell back dead. A thousand arms were aimed at the nabob, who was, in the same instant, mortally wounded."*

The introduction of firearms into the East rendered the ancient position in battle of the princes of India, seated upon their lofty elephants, one of

^{*} Orme, vol. i., p. 132.

¹ lb., p. 100.

[†] Ib., p. 142.

great and peculiar danger. In such a situation they were exposed much more than their officers. who were mounted on horses, to the fire of the infantry, which effected a surer destruction than the random arrows of the archers: but the danger of quitting their proud elevation was even greater than that of retaining it. The elephant's back was the seat of honour and of power; the throne from which they arranged the movements of their adherents, and directed the tide of battle, surrounded by the most faithful of their slaves. To quit the elephant was to spread among their followers the belief that they had perished; and this belief was destruction: for, according to an almost invariable custom in Hindostan, when the chief falls the rout becomes general. In the battle which gave Aurengzebe the victory over his brother Dara, he commanded, while his troops were slaughtered around him with scarcely a hope of escape, that he might sit among his few remaining followers. unable to retreat, if he even had the inclination. The politic prince knew the temper of an Asiatic army. The amari of the elephant was his throne, and while the throne remained filled he could com. mand obedience. The unhappy Dara was betray. ed into a neglect of this principle, and he lost the empire. Bernier has told the story with his usual fidelity and spirit:

"Calil-uliah had suffered some indignity at the nands of Dara, and he considered the hour arrived when he might gratify the resentment which had never ceased to rankle in his bosom. His abstinence from all share in the battle did not, however, produce the mischief intended, Dara having proved

victorious without the co-operation of the right The traitor, therefore, had recourse to another expedient. He quitted his division, followed by a few persons, and riding with speed towards Dara, precisely at the moment when that prince was hastening to assist in the downfall of Morud-Bakche, he exclaimed, while yet at some distance, Mohbarek bad! Hazaret! Salamet! Elhamdul-ellah! May you be happy! May your majesty enjoy health and reign in safety! The victory is your own! But, let me ask, why are you still mounted on that lofty elephant? Have you not been sufficiently exposed to danger? If one of the numberless arrows or balls, which have pierced your canopy, had touched your person, who can imagine the dreadful situation to which we should be reduced. In heaven's name, descend quickly, and mount your horse; nothing now remains but to pursue the fugitives with vigour. I entreat your majesty, permit them not to escape.

"Had Dara considered the consequences of quitting the back of his elephant, on which he had displayed so much valour, and served as a rallying-point to the army, he would have become master of the empire; but the credulous prince, duped by the artful obsequiousness of Calil-ullah, listened to his advice as though it had been sincere. He descended from the elephant and mounted his horse; but a quarter of an hour had not elapsed; when, suspecting the imposture, he inquired impatiently for Calil-ullah. The villain was not, however, within his reach; he inveighed vehemently against that officer, and threatened him with death; but Dara's rage was now impotent, and his men-

ace incapable of being executed. The troops having missed their prince, a rumour quickly spread that he was killed, and the army betrayed; a universal panic seized them; every man thought only of his own safety, and how to escape from the resentment of Aurengzebe. In a few minutes the army seemed disbanded, and (strange and sudden reverse!) the conqueror became the vanquished.

Aurengzebe remained for a quarter of an hour steadily on his elephant, and was rewarded with the crown of Hindostan: Dara left his own elephant a few minutes too soon, and was hurled from the pimacle of glory to be numbered among the most miserable of princes."*

Sultan Sujah, the younger brother of Dara, lost the empire precisely in the like manner; and Aurengzebe, though surrounded with extraordinary difficulties, won it a second time in the same way, by the influence of his better fortune or judgment. "An arrow killed the man who guided Aurengzebe's elephant; the animal became unmanageable. and the danger growing more appalling, the king was about to dismount, when Emir Jemla, who was near him, prevented him from accomplishing his fatal purpose."† It is probable that the extreme hazard of his exposed situation drove Dara from the back of his elephant, as much as the advice of his perfidious counsellor. "A cannonball having killed his foster brother, who sat with him on the elephant, he was almost blinded with the blood. A rocket at the same time passing by his ear, singed his turban; a second followed, and, having struck in the front of the amari, burst, and broke

^{*} Bernier, vol. i., pp. 62, 63,

[†] Bernier.

it all to pieces. His colour was seen then to change. The danger, indeed, of employing elephants in battle, after the use of artillery and rockets was common in India, must have been extreme. Tavernier says, that Aurengzebe was compelled to raise the siege of Daman, because the garrison, in a sally which was headed by a French engineer, had the prudence to attack the elephants of the besiegers with fireworks; and that these, turning upon their masters with ungovernable fury, scattered general destruction through their camp.

In earlier periods of the Mogul empire, elephants were armed for battle with preparations somewhat similar to the defences of warriors in the ages of chivalry. Dow, describing the elephants of Akbar, says, " they wear plates of iron upon their foreheads." 'Vincent le Blanc† mentions the elephants of the king of Ternassery as "of the largest size of. the East, covered to the ground with beeves' hides, and, over them, with divers trappings. These hides . are fastened underneath the belly with iron chainst and are difficult to be got off." The Ayeen Akbery is more minute. "Five plates of iron, each one cubit long and four fingers broad, are joined together by rings, and fastened round the ears of the elephant by four chains, each an ell in length; and between these another chain passes over the head and is fastened in the kellaweh; and across it are four iron speiks with katasies and iron knobs. There are other chains with iron spikes and knobs hung under the throat and over the breast, and

^{*} Dow's Hindostan.

[†] An Eastern traveller, quoted in Ranking's "Wars and Sports."

others fastened to the trunk; these are for ornament and to frighten horses, Pakher is a kind of steel armour that covers the body of the elephant: there are other pieces of it for the head and proboscis. Gejihemp is a covering made of three folds, and is laid over the pakher." Dow adds. that "a sword is bound to their trunk, and daggers are fastened to their tusks." But the mighty power of the animal, in crushing the ranks of an enemy, was principally relied upon. The armour and the swords were to add to the dismay which an immense troop of elephants were of themselves calculated to produce. The Emperor Akbar well knew their power in scattering masses of terrified men. On one occasion when he stormed the fort of Chitar, the garrison retired to the temples. "Akbar, perceiving he must lose a great number of his troops in case of a close attack, ordered a distant fire to be kept up upon the desperate Rajaputs, till he had introduced three hundred elephants of war, which he immediately ordered to advance to tread them to death. The scene became now too shocking to be described. Brave men, rendered more valiant by despair, crowded around the elephants, seized them even by the tusks, and inflicted upon them unavailing wounds. The terrible animals trode the Indians like grasshoppers under their feet, or, winding them in their powerful trunks, tossed them aloft into the air, or dashed them against the walls and Of the garrison, which consisted of eight thousand soldiers and of forty thousand inhabitants, thirty thousand were slain, and most of the rest taken prisoners." In the rapid marches of

* Dew, vol. ii., p. 258,

his victorious prince, the elephants suffered greatly. Purchas, speaking of his progress from Kashmire in 1597, says: "This country he left when summer was past, and returned to Lahore, losing many elephants and horses in the way, both by famine, then oppressing the country, and the difficulty of the passages; the elephants sometimes, in the ascent of hills, helping themselves with their trunks, leaning and staying themselves, being bur-

dened, thereon, as on a staff."*

The power of the elephant in battle has fallen before the greater power of artillery and of scientific tactics. But it is little more than three centuries ago that the chief in India who possessed the greatest force of elephants was almost sure of victory. The Emperor Baber, in his memoirs, gives a remarkable illustration of the terror which the animal produced. "The troops who accompanied Alim Khan were dispersed, being busy plundering and pillaging. Sultan Ibrahim's troops perceived that the enemy were not in great force, and immediately moved forward from the station which they had kept, though very few in number, and having only a single elephant; but no sooner had the elephant come up, than Alim Khan's men took to flight, without attempting to keep their ground."† Baber himself scarcely employed elephants in war, although descended from Timour, to whom their use was familiar; but he appears to have met their terror with a bold front. His expressions remind us of the quaint language of Bunyan: "I placed my foot in the stirrup of resolution, and my hand on the reins of confidence in God, and marched

^{*} Book v., chap. vii. ' ' Memoirs, p. 296. .

against Sultan Ibrahim, the son of Sultan Iskander, the son of Sultan Behlal Lodi Afghan, in whose possession the throne of Delhi and the dominions of Hindustan at that time were; whose army in the field was said to amount to a hundred thousand men, and who, including those of his Amirs, had nearly a thousand elephants."*

The courage and perseverance which hesitated not to encounter real and imaginary dangers, placed Baber upon the throne of Delhi. The same qualities added the peninsula of India to the mighty empire of Timour or Tatherlane. This daring and ambitious adventurer, who, having seized upon the sceptre which Genghis Khan had wielded, had advanced with hasty strides to universal dominion, by the successive conquests of Persia, of Turkistan, of Siberia, and of Russia, proposed to his armies the invasion of India. It was a land of terrors; and he was answered by murmurs of "We may subdue Hind, yet it hath many ramparts; rivers, wilderness. es, and forests; soldiers clad in armour! and the elephants, destroyers of men!" But the soldier who had invaded the inclement North "with such mighty powers, that thirteen miles were measured from his right to his left wing," t was not to be deterred by unknown evils. He crossed the Indus. , penetrated the desert, on the edge of which Alexander halted and wept, and in six weeks he was near to Delhi. Nine thousand of the Indian troops came in his way, with twenty-seven elephants. He encountered them, and they fled. In the train of the conqueror were a hundred thousand-Hindon

^{*} Memoirs, p. 300.
† Timour's "Inatitutes," translated by W Davy, and published by Dr. White, 1780
‡ Gibben.

prisoners. When they saw the elephants they rejoiced in the hope of the invader's defeat. The fierce soldier rewarded their patriotic exultation by an order for a general massacre; and in one day

they all perished!

The army of Timour still shrunk from an encounter with the strange terror of the elephants. When he placed his troops in the plain before Delhi. it was necessary to allay their fears by extraordinary-precautions. He surrounded the camp with an enormous ditch and a rampart of bucklers: and buffaloes were tied together round the rampart by the neck and feet, with brambles upon their heads to be set on fire when the elephants approached. The sultan Mamood sallied forth from his castle to give the invader battle (A.D. 1399). consisted of ten thousand horse, forty thousand foot, and elephants armed with cuirasses, and poisoned daggers upon their tusks.. In the wooden towers upon their backs, in the form of bastions, were crossbowmen and archers, who could fight under cover. On the side of the elephants were flingers of fire and melted pitch, and rockets shod with iron. Such is the description of Sherefeddin, who composed, in Persian, the history of Timour, from his original journals. The dread of this array in the army of the invader was extreme. The soldiers, says the historian, feared that the elephants might fling them into the air; the learned doctors wished to be placed near where the ladies were. Neither bravery nor knowledge could give confidence in that hour of alarm. Upon the elephants' backs were carried kettledrums of brass; and these, united to the din of cymbals, and bells, and trumpets,

dismayed eyen the most dauntless. Timour fell upon the earth in prayer: he that had a month before murdered a hundred thousand captives in cold blood, besought God to give him the victory. conqueror prayed in the same spirit of fanaticism with which, five years after, he made a declaration to his emirs in these remarkable words: "As my vast conquests have caused the destruction of a great many of God's creatures, I have resolved to atone for the crimes of my past, life by extermina. ting the infidels of China!" In the battle of Delhi the fortune of the Mongol did not forsake him. The elephants of the sultan threw his own left wing into disorder; the right was repulsed; and Timour himself led his troops against the centre. phants fled before the sabres of his horsemen. The expert swordsmen aimed at the trunks of the terrified animals, and many of them were strewed over the field with the slain. The alarm which the supposed invincibility of the elephants had produced was dissipated for ever. Timour's grandson, only fifteen years of age, wounded an elephant; the men upon his back were overthrown; and the boy drove the animal before him into his grandfather's camp. · The next day the invader sat on the throne of the Indian monarch, and received the homages of his new subjects. Twelve rhinoceroses and a hundred and twenty elephants were paraded before him; and the well-trained flatterers of despotism, certainly not possessing the discrimination which Cassiodorus assigns to the species, that they honour good princes, tyrants never, placed themselves in a humble posture, and made a cry as if demanding quarter. They were more fortunate in their entreaties for

mercy than the wretched inhabitants of the city. The elephants were transmitted as presents to the Persian provinces: the people were plundered by the soldiery and massacred at their pleasure; while the emirs thought it a pious duty to, send to the abyss of hell, they said, the souls of these infidels.

Although Timour had resisted the terror of the elephants, he was not unwilling to avail himself of this instrument of war, to spread alarm among those to whom it was a new danger, as a few months before it had been to him. In his letter to Bajazet, written after his conquest of India, he says, metaphorically, "Thou art no more than a pismire, why wilt thou seek to provoke the elephants? Alas! they will trample thee under their feet." † In less than two years the conqueror of Hindostan was at Syria. In the battle before Aleppo, the main body of his army was covered with a rank of elephants to serve as a rampart. Their towers were filled with archers and flingers of Greek fire. umph of the elephants in this fight was a signal contrast to their defeat at Delhi. They coiled up their trunks like serpents, to avoid the sabres of the Mamelukes; they rushed upon the main body of the Syrians, trampling them under their feet, and throwing their bodies on high with their trunks.‡ In the battle of Angora, which decided the fate of Bajazet, the conqueror of Hindostan ostentatiously showed a line of elephants, the trophies rather than the instruments of victory."§

In the adoption of elephants as instruments of

^{*} Sherefeddin.

f Gibbon, chap. ixv.

war, after he had triumphed over their strength when employed in the ranks of his enemies, Timour only followed the examples of Kublai Khan and Alexander. The elephant was unknown in the armies of the Grand Khan till he had taken two hundred in a great victory; nor had the animal been employed in China and the other provinces of the Mogul empire as a beast of burden. Marco Polo's description of the battle in which Kublai Khan first conquered the elephants, affords some curious illustrations of the ancient Indian mode of

employing the quadruped in war:

"It happened that, in the year 1272, the Grand Khan sent an army into the countries of Vochang and Karazan for their protection and defence against any attack that foreigners might attempt to make. When the King of Mien* and Bangala in India, who was powerful in the number of his subjects, in extent of territory, and in wealth, heard that an army of Tartars had arrived at Vochang, he took the resolution of advancing immediately to attack it, in order that, by its destruction, the Grand Khan should be deterred from again attempting to station a force upon the borders of his dominions. For this purpose he assembled a very large army, including a multitude of elephants (an animal with which his country abounds), upon whose backs were placed battlements or castles of wood, capable of containing to the number of from twelve to sixteen in each. With these, and a numerous army of horse and foot, he took the road to Vochang, where the Grand Khan's army lay; and, encamping at no great distance from it, intended

to give his troops a few days of rest. As soon as the approach of the King of Mien with so great a force was known to Nestardin, who commanded the troops of the Great Khan, although a brave and able officer, he felt much alarmed, he not having under his orders more than twelve thousand men (veterans, indeed, and valiant soldiers); whereas the enemy had sixty thousand, besides the elephants, armed as has been described. He did not. however, betray any signs of apprehension, but, descending into the plain of Vochang, took a position in which his flank was covered by a thick wood of large trees, whither, in case of a furious charge by the elephants, which his troops might not be able to sustain, they could retire, and from thence, in security, annoy them with their arrows. * * * * Upon the King of Mien's learning that the Tartars had descended into the plain, he immediately put his army in motion, took up his ground at the distance of about a mile from the enemy, and made a disposition of his force, placing the elephants in the front, and the cavalry and infantry in two extended wings in their rear, but leaving between them a considerable interval. Here he took his own station, and proceeded to animate his men and encouraging them to fight valiantly, assuring them of victory, as well from the superiority of their numbers, being four to one, as from their formidable body of armed elephants, whose shock the enemy, who had never before been engaged with such combatants, could by no means resist. Then, giving orders for sounding a prodigious number of warlike instruments, he advanced boldly with his whole army towards that of the Tartars, which remained firm, making no movement, but suffering them to approach their intrenchments. They then rushed out with great spirit and the utmost eagerness to engage; but it was soon found that the Tartar horses, unused to the sight of such huge animals, with their castles, were terrified, and, wheeling about, endeavoured to fly, nor could their riders by any exertions restrain them, while the king, with the whole of his forces, was every moment gaining ground. As soon as the prudent commander perbeived this unexpected disorder, without losing his presence of mind, he instantly adopted the measure of ordering his men to dismount, and their horses to be taken into the wood, where they were fastened to the trees. Being dismounted, the men, without loss of time, advanced on foot towards the line of elephants, and commenced a brisk discharge of arrows: while, on the other side, those who were stationed in the castles, and the rest of the king's army, shot volleys in return with great activity; but their arrows did not make the same impression as those of the Tartars, whose bows were drawn with a stronger arm. So incessant were the discharges of the latter, and all their weapons (according to the instructions of their commander) being directed against the elephants, these were soon covered with arrows, and, suddenly giving way, fell back upon their own people in the rear, who were thereby thrown into confusion. It soon became impossible for their drivers to manage them, either by force or address. Smarting under the pain of their wounds, and terrified by the shouting of the assailants, they were no longer governwhile, but, without guidance or control, ran about in

all directions, until, at length, impelled by rage and fear, they rushed into a part of the wood not occupied by the Tartars. The consequence of this was, that, from the closeness of the branches of large trees, they broke, with loud crashes, the battlements or castles that were upon their backs, and involved in the destruction those who sat upon them. Upon seeing the route of the elephants, the Tartars acquired fresh courage, and, filing off by detachments, with perfect order and regularity, they remounted their horses and joined their several divisions, when a sanguinary and dreadful combat was renewed. * * *

"The losses in this battle, which lasted from the morning till noon, were severely felt on both sides: but the Tartars were finally victorious: a result that was materially to be attributed to the troops of the King of Mien and Bangala not wearing armour as the Tartars did, and to their elephants, especially those of the foremost line, being equally without that kind of defence, which, by enabling them to sustain the first discharge of the enemy's arrows. would have allowed them to break his ranks and throw him into disorder. A point, perhaps, of still greater importance is, that the king ought not to have made his attack on the Tartars in a position where their flank was supported by a wood, but should have endeavoured to draw them into the open country, where they could not have resisted the first impetuous onset of the armed elephants, and where, by extending the cavalry of his two wings, he might have surrounded them. tars, having collected their force after the slaughter of the enemy, returned towards the wood into which

the elephants had fled for shelter, in order to take possession of them, where they found that the men who had escaped from the overthrow were employed in cutting down trees and barricading the passages, with the intent of defending themselves. But their ramparts were soon demolished by the Tartars, who slew many of them; and, with the assistance of the persons accustomed to the management of the elephants, they possessed themselves of these to the number of two hundred or more. From the period of this battle, the Grand Khan has always chosen to employ elephants in his armies, which before that time he had not done. consequences of the victory were, that his majesty acquired possession of the whole of the kingdom of Bangala and Mien, and annexed them to his dominions."*

In a few years after this decisive battle, Kublai Khan was in arms against his relation Nayan, who had rebelled against his authority. In the battle which decided the fate of the unhappy rebel, who was taken prisoner and smothered between two carpets, the magnificent despot "took his station in a large wooden castle, borne on the backs or four elephants, whose bodies were protected with coverings of thick leather, hardened by fire, over which were housings of cloth of gold. The castle contained many crossbow men and archers, and on the top of it was hoisted the imperial standard, adorned with representations of the sun and moon."†

Mamood of Ghizni, in his repeated invasions of Hindostan in the eleventh century, constantly em-

^{*} Marco Polo, p. 441, &c.

^{† 1}b., book ii., c. i.

pleyed elephants in war. His forces (A.D. 1024) consisted of fifty-five thousand horse, thirteen hundred elephants, and a hundred thousand infantry.* In his war against the King of Kaslegar he is thus

picturesquely described in battle:

"Mamood, perceiving the enemy's progress, leaped from his horse, and, kissing the ground, inwoked the aid of the Almighty. He instantly mounted an elephant of war, encouraged his troops, and made a violent assault upon Elich. The elephant, seizing the standard bearer of the enemy, folded round him his trunk, and tossed him aloft into the sky. He then pressed forward like a mountain removed from its place by an earthquake, and trod the enemy like locusts under his feet."

When Mamood invested Callinger, the raja of that city sued for peace, and offered him three thousand elephants and other presents. dian prince probably considered that his enemy might be unacquainted with the habits of the animal; and he therefore ventured upon an experiment not very likely to conciliate the rough hero of Turquestan. "The king" (Mamood) "agreed to the terms proposed and the raise to try the bravery of the sultan's troops, intoxicated the elephants with certain drugs, and let them loose without riders in the camp. Mamood, seeing the animals advancing, perceived the trick by the wildness of their motions, and immediately ordered a party of his best horse to seize, kill, and drive them from the camp: some of the Turks, emulous to display their brayery in the presence of their king and of both armies, mounted the greatest part of

^{*} Dow, i., 65.

the elephants, and drove the rest into an adjacent wood, where they were soon reduced to obedience."*

It would be easy to multiply examples of the warlike employment of the elephant by the princes of Hindostan, and in the Mongol empire. Such illustrations of our subject, however, would add little to its interest; for, although we should necessarily have to speak of Asiatic pomp and luxury, of the movements of mighty armies, more interesting in the rude magnificence of their cumbrous array than the light-armed troops of modern Europe, such pictures, stimulating as they may be to the imagination, would offer scarcely any variety. Oriental despotism is as unchanging a thing as exists in a world of change. Nor is it our object to enumerate every historical notice of the animal in his connexion with mankind, but to select such of the more amusing and instructive details as are to be found in the obscurity of events long gone by. Violent political revolutions, and the slower changes of time alone, have altered the situation of the elephant even in the same regions. In India he is employed to this day as at the period of Alexander's conquest. In Persia we hear of the elephant from a time antecedent to Alexander, to the fifth century of the Christian era; but in the seventeenth century, "the King of Persia used no elephants in his armies." The connecting links between modern and ancient history are difficult to be traced, in this as in most other subjects of national custom and polity. In this case the information to be gathered would scarcely repay the

^{*} Dow. i., 64. † Taverniér.

inhour of research. We therefore at once proceed to the elephants of the Macedonian conqueror and his successors, and thence to those of the Romans and Carthaginians; to the pomps of triumphs and the cruelties of amphitheatres; to the exhibitions of ancient glory and splendour, of bloodshed and madness; to battles more slaughterous and obstinate than any which have occurred since the invention of artillery; to scenes of war, which, however varied in their details from the contests of our own day, by the glittering pageantry and power of

"Cuirassiers all in steel for standing fight, Chariots, or elephants indersed with towers Of archers,"

are still the same results of evil passions, sometimes, indeed, purifying the world as a hurricane clears the atmosphere, but always leaving abundant traces of devastation, which many years of tranquillity are insufficient to repair.

CHAPTER X.

EMPLOYMENT OF ELEPHANTS IN WAR BY ALEXANDER THE GREAT AND HIS SUCCESSORS.

Many of the notices of the elephant which we find in the ancient European writers had reference to the ages of fabulous tradition. Bacchus, the conqueror of India, the land of elephants, is fre-

* Paradise Regained.

quently represented by many of the poets and historians of Greece and Rome as having these animals associated with his triumphs. By Nonnus he is described as seated on the neck of an elephant: and by Ptolemy Philadelphus, in Athenæus. as reclining in a chariot, sometimes drawn by elephants, and sometimes by tigers and panthers. Pliny says, that the first elephants which were voked in India were those which drew the car of the conquering "Liber Pater;" and Lucian mentions, that in the temple of the Dea Syria were shown foreign garments, Indian gems, and horns of elephants which Bacchus brought from Ethiopia. Such mythological allusions, however, throw no greater light upon the early history of this animal, than the representations of Bacchus, drawn in a car by four elephants, which occur in coins of Commodus. Antoninus Pius. and Alexander Sever-The earliest notice of the use of the elephant in war is that of Ctesias: "Cyrus makes an expedition against the Derbikes, whose king was Amoræ-The Derbikes place elephants in ambush, and put to flight the horsemen of Cyrus. Now Cyrus fell from his horse, and was wounded by an Indian in the thigh; for the Indians fought with the Derbikes, and, indeed, supplied them with elephants."† The same writer says (as quoted by Ælian, lib. xvii.), that the King of the Indians goes to war with more than 100,000 elephants. Ctesias admits that he tells us this on hearsay; but he adds, "I saw elephants in Babylon overthrow palm-trees at the bidding of their driver." Herodotus, who also men-

[&]quot; A name of Bacchus.

[†] Ctesias, Persian fragments in Photius, chap. 6.

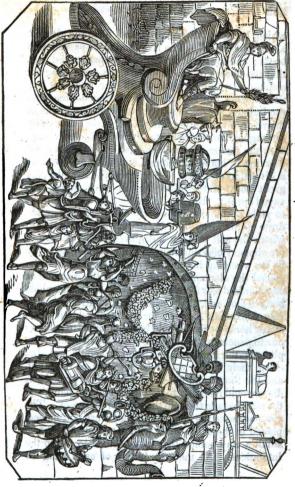
tions elephants' teeth, visited Babylon about 450 or 460 B.C., and might have seen the same. Ctesias was at Babylon B.C. 401, and before and after that With the exception of the passages in Ctesias and Herodotus, and a slight notice in Aristoph. anes and Plato, it would be difficult to point out any record of the elephant antecedent to the time when the Macedonian conqueror opened the wonders of the East to the European nations. writers, however, speak in very precise terms of the amazing troops of elephants of war employed by the early kings of India. Arrian and Pliny tell us of one king of these regions, so prolific of-marvels, possessing five hundred thousand elephants, and another seven hundred thousand. stories are evidently exaggerations, naturally growing out of the impressions which were produced by the first familiarity of the Europeans with a region abounding with these animals.

Although from the earliest times ivory was an article of commerce in demand among all the people who traded with India, the elephant does not appear to have been employed as an animal of burden, even by the Persians and Assyrians, until a comparatively recent period. The camel was the principal medium of intercourse among those nations. Neither is the name of the elephant (a circumstance which shows that he was unknown to the early Jews) to be found in the Hebrew language. Nearly a century before the time of Alexander, the quadruped was noticed in the writings of several Greek authors, so that the great conqueror must have been prepared for the new danger which he had to encounter in his invasion of

India; and to his ardent imagination this vague and shadowy terror must have presented an excite. ment as stimulatnig as the visions of those thrones of "barbaric pearl and gold" which he panted to lay prostrate. But he encountered the elephants of war before the passage of the Indus. At the battle of Gaugamela, commonly called that of Arbela, where the power of Darius, the Persian king, was overthrown, there were a few elephants;* and "all the elephants, and all the chariots which were not broken in the flight, were taken." + After this great victory, the invader, on his march to Susa, was met by the governor of the province "with presents of regal magnificence. Among other things, there were dromedaries of an extraordinary swiftness, and twelve elephants brought from India by Darius; but they were not now a terror to the Macedoni. ans. as they were intended, but a help, fortune having transferred the riches of the vanquished to the victor." On the bank of the Indus some elephants were captured by the victorious army, from scattered Indians who were flying before it.

The invader of the East having passed the Indus, encountered no enemy till he reached the Hydaspes. On the opposite bank lay the army of King Porus. The breadth and rapidity of the river, the formidable numbers of the hostile forces, the chariots of war which were distributed among their ranks, and, above all, the prodigious size and multitude of the elephants, struck dismay into the soldiers of Alex-"There," says Quintus Curtius, "stood those huge bulks of overgrown bodies, the elephants,

⁴ Arrian, book iii. † fbid. ‡ Quintus Curtius, book v., c.2; Digby's translation.



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which, being on purpose provoked, filled the air with a horrible noise." The river had to be passed with boats; and the great danger to be apprehended was. that the horses of the Greeks, upon perceiving the elephants, would be seized with fear and leap into For several days the Macedonians and the Indians lay encamped on the opposite banks of the river, the one attempting to effect the passage by stratagem, the other constantly resisting the attempt with the terror of the elephants. Porus, however, relaxing in his watchfulness, and being deceived by a diversion of a part of the army of Alexander, the great body of the Macedonians were safely conveyed across. But the Indian king was resolved not to yield up his dominions without a struggle. He drew up his army in order of battle upon "a plain where the soil was not incommodious by reason of the slippery clay, but firm and sandy, and every way fit for wheeling his chariots round upon. First, he placed the elephants in the front, at the distance of one hundred feet from each other, to cover the whole body of foot, and, at the same time, to strike a terror into Alexander's horse; for he imagined that none, either horse or foot, would be so hardy as to endeavour to penetrate through the spaces between the elephants; the horsemen, he thought, could not, because their horses would be tetrified at the sight. and the foot would not dare, because the armed soldiers would be ready to gall them on each hand, and the elephants to trample them under their feet. foot possessed the next rank; they were not, indeed, placed in the same order with the elephants, but so small a way behind that they seemed to fill up the interstices. At the extremities of each wing he

placed elephants, bearing huge wooden towers, wherein were armed men; the foot were defended on each hand by the horse, and the horse by the charjots, which were placed before them."*

With the caution which is the best characteristic of a skilful general, Alexander resolved to avoid a direct attack upon the main body of the elephants. Perhaps the alarm which his soldiers are described to have felt at "those beasts which, being disposed among the men in front, at a distance bore the appearance of towers," might have somewhat influenced this determination. The elephant which carried Porus himself, a man of extraordinary stature, was greatly superior to all the rest in height. Alexander is described as rejoicing in the splendid appearance of the enemy which he trusted to subdue. "At last I have met with a danger suitable to the greatness of my soul,"†; The long pikes of the Macedonian phalans, the rapid movements of the cavalry, and the cloud of arrows poured in by the light-armed Thracians, soon spread a panic among "the Indians." > But the elephants for a long time sustained the assaults of their impetuous enemies. . They trampled the infantry under their feet; and "the most dismal thing of all was when these animals took up the armed soldiers with their trunks, and delivered them up to their governors on their backs." t 'The day was far spent, and still the fight was doubtful; till at length the Macedonians directed all their power against the sagacious beasts that threatened to baffle the skill and bravery of the most disciplined troops of the earth. The Greeks chop-

. ± Ibiil.

^{*} Arrian, book v., c. 15. † Quintus Curtius, book viii.

ped their legs with axes, and cut off their trunks with a crooked weapon resembling a scythe.* While the infantry of Alexander thus encountered the principal strength of the Indians, his cavalry closed round them in overwhelming masses. "And the beasts being now pent up in a narrow space, and violently enraged, did no less mischief to their own men than the enemy; and as they tossed and moved about, multitudes were trampled to death; besides, the horse being confined among the elephants, a huge slaughter ensued; for many of the governors of the beasts being slain by the archers, and the elephants themselves, partly enraged with their wounds and partly for want of riders, no longer kept any certain station in the battle, but, running forward, as if madness had seized them, they pushed down, slew, and trampled under foot friends and foes without distinction; only the Macedonians having the advantage of a more free and open space, gave way and made room for the furious beasts to rush through their ranks, but slew them whenever they attempted to return; but the beasts at last, quite wearied out with wounds and toil, were no longer able to push with their usual force, but only made a hideous noise, and, moving their fore feet heavily, passed out of the battle."t

Although his forces were scattered all around him, the courage of the Indian king remained unconquerable. Exposed "as a mark at which every one levelled," he had received nine wounds, before and behind; but he still continued to hurl his javelins at the enemy till they might be said "to drop from his faint arm rather than be delivered." The

⁺ Quintus Curtius, book viii. → Arrian, beok v., chap. 17.

governor of Porus's elephant at last put the beast to flight; and Alexander himself slowly followed him upon a wounded horse. At length Porus, exhausted by his wounds, slid down from the back of his elephant; and the Indian guide, thinking the king desired to alight, commanded the animal to kneel down. The whole of the elephants were accustomed to imitate the movements of that upon which the king rode, and in like manner they instantly knelt down, and thus became a prey to the conquerors.* Their habitual obedience to their masters involved their common ruin.

The memory of this great battle remained fresh among the Indians for several centuries afterward. In the life of Apollonius of Tyana (a book of somewhat doubtful authority) it is stated that this traveller, coming to Taxilla, a town in India, met with an elephant which the inhabitants perfumed with sweet odours and adorned with garlands. On his tusks were rings of gold, on which were inscribed Greek characters to this effect, "Alexander, son of Jupiter, dedicates Ajax to the Sun." Ajax was said to be the elephant of Porus; and to have had not only the good fortune of surviving the slaughter which attended his master's defeat, but of living to be thus honoured three hundred and lifty years after the battle.

The power by which Alexander had subdued the mighty monarchs of the East was not of a nature to derive any considerable assistance from the service of the elephants that had become the spoil of his victories. His was the peculiar force of an advanced civilization—the energy, the compactness,

. Quintus Curtius.

the rapid movement of perfect discipline-opposed to the indecision, the scattered strength, and the slow parade of a condition of splendid barbarism. Although, therefore, the conqueror was careful to deprive his enemy of that arm of war which he himself described as "at best but a dangerous succour;" although, in his triumphant march beyond the Indus, he gladly received every accession of elephants which the terror of his name or the instant force of his sword might procure him, and even created among his followers an elephantarch, or governor of the elephants, yet it does not appear that he actively employed the animal in his own armies. He was satisfied to exhibit these spoils of war to the wondering eyes of the people whose territories he had overrum. When he gave laws to the kings and ambassadors who came to do homage to his power, his tent was surrounded by elephants. He adopted the customs of the princes of the East, to secure to himself the reverence of the people who obeyed them, through the influence of their ancient associations. He employed elephants, too, in the barbarous sports by which conquerors have been wont to gratify their own pride, and secure the blind admiration of the many who enchain themselves to their chariot-wheels. Pliny tells a story of a dog of wonderful size, presented to Alexander by a king of Albania, that, having vanquished a lion, was let loose upon an elephant, and by his craft and courage laid the enormous beast prostrate, with a fall which shook the earth upon which they stood. But the victories of Alexander enabled the naturalists of Greece to behold an animal which had been the subject of

mistakes and exaggerations, perhaps in a greater number than attached to any other quadruped. Aristotle then first described his habits with singular correctness; and it is remarkable that succeeding naturalists, in deviating from the account of the Greek philosopher, have only exhibited their own

want of judgment.

When Alexander, who, in the words of the writer of the book of Maccabees, had made "many wars, and won many strongholds, and slew the kings of the earth, and went through to the ends of the earth, and took spoils of many nations, fell sick and perceived that he should die, he called his servants. such as were honourable and had been brought up with him from his youth, and parted his kingdom among them." His elephants naturally came into the possession of his successors. By these captains they appear to have been generally employed in the sanguinary wars which arose out of their individual contests for empire; and these ambitious struggles had a natural tendency to spread the use of the elephant over new regions. Eumenes, for example, obtained a large number of these animals, which had belonged to King Porus, through the treacherous murder of the Indian monarch. In his battle with Antigonus, elephants were employed in both armies.; and those of Eumenes were under the command of an Indian captain. Polysperchon, in his attack upon the city of Megalopolis, employed sixty-five elephants, which from their great size and strength were considered invincible; but the elephants were destroyed, as well as the flower of his army, by a stratagem of the besieged, who tempted them into ditches, in which spikes were placed

lightly covered with earth; and here the foundered animals, unable to advance or retreat, perished under the arrows and stones of the assailants.

In the histories of the early wars between Ptolemy and the rival leaders of Alexander's forces, there is frequent mention of the use of elephants. When Ptolemy and Seleucus attacked Demetrius at Gaza, their first care was to protect their army from the shock of the elephants of their enemy: and for this purpose they prepared "an iron palisado, sharp-pointed with iron, and fastened together with chains." The narrative of Diodorus Siculus shows that the precaution was not taken in vain. "And now, when the fight between the horse had been a long time doubtful, the elephants, forced on by the Indians, made so terrible an onset, that it appeared impossible for any force to have stood against thera. But when they came up to the palisado, the darters and archers sorely galled both the beasts and their riders; and being still forced on and whipped by the Indians, some of them stuck upon the sharp points of the palisado, with which, besides the multitude of the darts and arrows that galled them, they were in such pain and torment that they caused a horrible tumult and confusion; for these creatures, in plain and level places, tear down all before them; but in those which are rough and craggy, they are of no use or service, because of the tenderness of their feet. Ptolemy, therefore, wisely foreseeing of what advantage this palisado would be; by that means frustrated the rage and fury of the beasts. length, most of the Indians that rode them being killed, all the elephants were taken; upon which

the greatest part of Demetrius's horse were in such a consternation that they forthwith fled."*

In the great battle of Raphia, between Ptolemy Philopator, the fourth of the dynasty, and Antiochus the Great, elephants were opposed to each other in nearly equal numbers. Polybius has described the contest of the elephants with his accustomed spirit: "The signal was sounded to engage, and the elephants, approaching first, began the combat. Among those that belonged to Ptolemy, there were some that advanced boldly against their adversa-It was then pleasing to behold the soldiers. engaged in close combat from the towers, and pushing against each other with their spears. But the beasts themselves afforded a far nobler spectaole as they rushed together, front to front, with the greatest force and fury. For this is the man-ner in which they fight. Twisting their trunks together, they strive each of them with his utmost force to maintain his own ground, and to move his adversary from his place; and when the strongest of them has at last pushed aside the trunk of the other, and forced him to turn his flank, he then pierces him with his tusks in the same manner as bulls in fighting wound each other with their horns. But the greater part of the beasts that belonged to Ptolemy declined the combat. For this usually happens to the elephants of Afric, which are not able to support either the smell or cry of the Indian elephants. Or rather, perhaps, they are struck with terror at the view of their enormous size and strength; since, even before they approach near together, they frequently turn

* Diodorus Siculus, lib. xiz., cap. vî.

their backs and fly; and this it was which at this time happened. As soon, therefore, as these animals, being thus disordered by their fears, had fallen against the ranks of their own army, and forced the royal guards to break the line, Antiochus, seizing the occasion, and advancing round on the outside of the elephants, charged the cavalry which. was commanded by Polycrates in the extremity of the left wing of Ptolemy. At the same time, also, the Grecian mercenaries, who stood within the elephants, near the phalanx, advanced with fury against the peltastæ, and routed them with little difficulty, because their ranks were likewise already broken by the elephants. Thus the whole left wing, of the army of Ptolemy was defeated and forced to . flv.''*

Nearly a century and a half afterward, we find a successor of Antiochus employing elephants of The reader is war in his battles with the Jews. probably familiar with the singular passage in the book of Maccabees, which describes the mode in which the animal was used in battle; but we transcribe it, as completing the picture of elephant tactics, which gave a new character to the wars of Asia after the conquest of India: "To the end they might provoke the elephants to fight, they showed them the blood of grapes and mulberries. Moreover, they divided the beasts among the armies, and for every elephant they appointed a thousand men, armed with coats of mail, and with helmets of brass on their heads; and, besides this, for every beast were ordained five hundred horse. men of the best. These were ready at every oc-

^{*} Polybius (Hampton's Translation), book v., chap. viii.

casion; wheresoever the beast was, and whithersoever the beast went, they went also, neither departed they from him. And upon the beasts were there strong towers of wood, which covered every one of them, and were girt fast unto them with devices; there were also upon every one thirty-two strong men, that fought upon him, besides the Indian that ruled him."

The same history presents an example of courage and self-devotion, which shows how much the elephant was an object of dread, and, at the same time, how little his real power could avail against human heroism: "Eleazar also, surnamed Savaran, perceiving that one of the beasts, armed with royal harness, was higher than all the rest, and supposing that the king was upon him, put himself in jeopardy, to the end he might deliver his people, and get him a perpetual name; wherefore he ran upon him courageously through the midst of the battle, slaying on the right hand and on the left, so that they were divided from him on both sides. done, he crept under the elephant, and thrust him under, and slew him; whereupon the elephant fell down upon him, and there he died."*

* Maccabees, book i.; chap. vi

CHAPTER XI.

EMPLOYMENT OF BLEPHANTS, IN WAR AND IN TRI UMPHS BY THE CARTHAGINIANS AND ROMANS.

ABOUT half a century after the death of Alexander, the elephant was first seen in Italy. In the battle of Heraclea (B.C. 280), Pyrrhus, king of Epirus, employed twenty Indian elephants, against the Romans. They had towers upon their backs full of bowmen; and Pyrrhus is described to have been indebted for his victory to the terror which the first sight of the elephants inspired. of Epirus, indeed, appears to have greatly relied upon the impressions to be produced by this new danger; but he had to contend with a people little accustomed to be shaken by vague apprehensions. When Fabricius went to Epirus to negotiate an exchange of prisoners with Pyrrhus, the king on one day offered him gold, which he refused; and on another, during their conference, caused an elephant to be suddenly produced, hoping to wrest from the fears of the Roman general those concessions which he could not obtain by his bribes. honest and undaunted warrior, with a smile, said, "Neither your gold yesterday nor your beast today has made any impression upon me."* four years after the battle of Heraclea, the elephants of Pyrrhus had ceased to be formidable. Curius Dentatus commanded his soldiers to attack * Plutarch: "Pyrrhus."

them with burning torches in one hand and their' swords in the other. An accident, too, completed the effect of this well-conceived plan. A young elephant, having been wounded, made a fearful roaring, and his mother rushing through the field to his succour, and being followed by others, threw the troops of Pyrrhus into complete disorder. of the captured elephants were led in triumph to Rome, where they were called Lucanian oxen, probably because they were first seen by the Romans in Lucania.* At the siege of Argos, Pyr. rhus was equally unfortunate in the employment of this quadruped. In the rush of his army into the town, the gates were too low to admit the turreted elephants, and the animals, crowding back, carried disorder into the ranks of the assailants. tarch, who mentions this circumstance, relates a romantic tale of the affectionate courage of the elephant of Pyrrhus on this occasion, who kept a host of enemies at bay when his master had fallen from his back, and, taking him in his trunk, succeeded in removing him to a place of safety. In a similar spirit it is told of the elephant of Porus, that he extracted the darts from his master's wounds. Plutarch and Ælian, who were almost contemporary, both give these questionable anecdotes, which they probably derived from some common tradition.

The Romans, having thus subdued the elephants of India; had soon to encounter those of Africa in much more formidable numbers. In the first Punic war, Regulus, the Roman consul, in his career of splendid success, captured eighteen elephants at the battle of Adis; but Xantippus, the Lacedæmonian.

Pliny, lib. viñ., cap. 6.

having taken the command of the Carthaginian troops, so judiciously availed himself of the power of his elephants, that he completely routed the Roman army. For some time after this event the Roman soldiers dreaded to encounter the formida. ble beasts who had trampled their legions in pieces. and the Carthaginians, consequently, lost no occasion for their employment. The forests of Africa abundantly supplied whatever numbers the expenditure of war might demand; and the Carthaginians not only relied upon this arm of war on . their own soil, but carried their elephants across the Mediterranean into Sicily. At the siege of. Panormus (Palermo), the Carthaginian officer drew up a hundred and forty elephants in one line in his attack upon that city; but the Roman consul, Metellus, pouring down a shower of darts from the ramparts, they fled in dismay, and the Roman troops, taking advantage of the rout, obtained a complete victory over the Carthaginian army. Upward of a hundred elephants were captured, and the consul, desirous to exhibit this extraordinary spoil to the admiring Romans, caused an immense raft to be constructed of planks, covered with earth, placed upon empty barrels, upon which the whole number of the elephants were conveyed across the straits to Rhegium (Reggio).* The . Roman people having been sufficiently gratified by the exhibition of these rare quadrupeds, the state, with a republican economy, caused them to be put to death, perceiving that the charge of their

^{*} Livy and Seneca state the number thus conveyed to Rome te have been one hundred and twenty; Dion one hundred and thirty-eight.

maintenance was not compensated by any services which would be derived from them.* It is stated also that the patient animals were treated with the greatest indignity, being driven round the circus by slaves with blunted spears. This was doubtless to wipe away the popular impression of terror which had been produced by the defeat of Regulus; and was somewhat like the policy of exhibiting kings in chains, and barbarian warriors in all the humiliation of slavery, to pamper the pride of the Roman citizens,

The defeat of the Carthaginian elephants by Metellus does not appear in any degree to have discouraged the national use of the quadruped. Hannibal employed them in his battles in Spain; and after the capture of Saguntum (B.C. 218), he received re-enforcements of the animal from Africa. In this year commenced the second Punic war. Hannibal set out to encounter the Romans on their own ground, with an army of fifteen thousand foot and thirty-seven elephants. Having effected the passage of the Pyrenees, he, according to some authorities, traversed Roussillon and Languedoc, and crossed the Rhone at Orange. The elephants were made to pass the rapid river with extreme difficulty. Livy states that the Carthaginian general, being unable to overcome their violent reluctance to enter the stream by ordinary means, directed the guide of one of the fiercest to irritate the animal, and then plunge into the river. elephant followed him in a transport of rage; and

^{*} Plin., Hist. Nat., lib. viii., cap. 7. Vernus is cited by Pliny as the authority for this account; but the naturalist states that other authors affirm that they were not killed.

the remainder, imitating his example, reached the opposite shore. The account which Polybius gives of this circumstance is, however, materially different. The narrative of the Greek historian is so interesting in itself, and so illustrative of the habits of the animal, that we willingly transcribe it.

"Hannibal, having posted his cavalry as a reserve on the side towards the sea, commanded the infantry to begin their march, while himself waited to receive the elephants, and the men that were left with them on the other side of the river. passage of the elephants was performed in the following manner: When they had made a sufficient number of floats, they joined them together and fastened them strongly to the ground upon the bank of the river. The breadth of both together was about fifty feet. To the extremity of these they fixed two more, which were extended over into the water; and, to prevent the whole from being loosened and carried down the river by the rapidity of the current, they secured the side that was turned against the stream by strong cables fastened to the trees along the bank. Having in this manner finished a kind of bridge, which was extended to the length of about two hundred feet. they then added to it two other floats of a much larger size, which were very firmly joined together, but were fastened in so slight a manner to the rest that they might at any time be separated from them with little difficulty. A great number of floats were fixed to these last floats, by the help of which the boats that we're designed to tow them over might hold them firm against the violence of the stream, and carry them in safety with the ele

phants to the other side. They then spread a quantity of earth over all the floats, that their colour and appearance might, as near as was possible. resemble the ground on shore. The elephants were usually very tractable upon land, and easy to be governed by their conductors, but were at all times under the greatest apprehensions whenever they approached near the water. Upon this occasion, therefore, they took two female elephants, and led them first along the floats, the rest readily followed; but no sooner were they arrived upon the farthest floats, than the ropes being cut which bound them to the rest, they were immediately towed away by the boats towards the other side. The elephants were seized with extreme dread. and moved from side to side in great fury and disorder. But when they saw that they were every way surrounded by the water, their very fears at last constrained them to remain quiet in their place. In this manner two other floats being from time to time prepared and fitted to the rest, the greater part of the elephants were carried safely There were some, indeed, that were so much disordered by their fears, that they threw themselves into the river in the midst of their pas-This accident was fatal to the conductors, who perished in the stream; but the beasts themselves, exerting all their strength, and raising their large trunks above the surface of the river, were by that means enabled not, only to breathe freely, but to discharge the waters also as fast as they received them; and having by long struggling surmounted likewise the rapidity of the stream, they at last all gained the opposite bank in safety."

* Polybius, by Hampton, book iii., chap. 4.

In his march along the bank of the Isere, towards the pass of the Little St. Bernard, Hannibal encountered the most determined resistance from the hardy mountaineers, who rolled down fragments of rock upon his advanced guard; but, whenever the elephants appeared, the people fled in terror. As he proceeded into the Alps, the same result of their formidable and strange appearance compensated the Carthaginian for the delays which they necessarily interposed to the rapidity of his march. The ground was slippery with a recent fall of snow, and the fearful acclivities, even without this obstacle, were little suited to the progress of the elephant, the inhabitant of the plains. In fifteen days the passage was accomplished, but the army was reduced to twenty thousand foot and six thousand horse. These mighty passes, through which neither the energies of war nor the quiet strength of commercial intercourse had created safe and practicable roads, saw their rugged pathways strewn with the carcasses of men and beasts, who toppled over the fearful chasms, or perished by exhaustion and want of food:

"Great was the tumult there, Desfening the din, when in barbaric pomp, The Carthaginian, on his march to Rome, Enterd' their fastnesses. Trampling the snows, The war horse rear'd, and the tower'd elephant Upturn'd his trunk into the murky sky, Then tumbled headlong, swallow'd up and lost, He and his rider."

ROGERS's Itely.

The number of elephants destroyed is not mentioned by the historians; many necessarily perished, but enough remained to constitute a powerful force, soon to be employed in the battles of the Ticinus and of the Trebia. It is difficult to imagine how these animals were conveyed at all through the tremendous passes of the Alps, without some mechanical contrivance. In the Roman invasion of Macedon, the consul Martius facilitated the descent of the elephants down a steep mountain by the construction of temporary bridges.* It does not appear that Hannibal adopted any similar means, but relied upon that all-conquering energy which, in its general influence upon his army, has rendered this celebrated passage of the Alps one of the most wonderful events of ancient history.

The historians minutely describe the powerful effects which the elephants produced in the battle of the Trebia. Livy records that the Gauls, who were auxiliaries of the Romans, could not bear up against the fierceness of their assaults. Appian states that the Roman horses in this great battle could endure neither the sight nor the smell of the elephants. Silius Italicus assigns the victory of Hannibal prin-

cipally to his elephants.

In crossing the Apennines after the battle of the Trebia, seven of these animals were starved to death. The small number remaining to Hannibal was probably still more reduced by subsequent fatigue, till at last, in passing the Arno, which was swollen by the mountain torrents, large numbers of men and horses perished; and of his elephants there only remained to Hannibal that Getulian beast on which he himself rode.

In a previous passage of the Po, the Carthaginian leader had advantageously employed his elephants,

* Livy, lib. xliv., cap. v.

by forming them in a line across the shallow river, so that, the force of the current being broken by those bulky masses, his soldiers might pass through with comparative ease. Perdicas put his elephants to a similar use in his unfortunate passage of the

Nile near Memphis.

The elephants with which Hannibal had crossed the Alps had thus wholly perished; but he had found their services too valuable to conduct the war without their aid. He was supplied with large reenforcements from Carthage. At the battle of Cannæ (B.C. 216), the Roman general attacked them with firebrands, setting fire also to the wooden towers on their backs, and some of the terrified animals plunged into the river.

Pliny has recorded, to the disadvantage of Hannibal, that, after this battle, he caused a combat to take place between some of his Roman prisoners and an elephant; and that, having promised his liberty to the soldier who should be victor, one of them had the good fortune to slay the beast single-handed. Hannibal, however, fearing that the Romans should lose their dread of his elephants if this brave man should return to relate his triumph, caused him to be murdered in cold blood.

In the military operations preceding the siege of Capua, we find the Carthaginians employing elephants in large numbers;* and in the battle of Nola (B.C. 215), four elephants were slain and two captured by the Remans.† Then again came re-enforcements from Carthage; and four years afterward, Hannibal marched from Tarentum to the relief of Capua, leaving his heavy troops and bag.

* Livy, lib. xxiii., cap. 18. † Ibid., lib. xxiii., cap. 46.

gage, that his hasty progress to the succour of hisbeloved city might not be encumbered; but taking with him thirty-three elephants, who (says the historian) were as swift as his men and horses, their heavy carcasses not sinking under the fatigues of a hasty march. During the succeeding four years, we constantly find a notice of the employment of the elephant by Hannibal in this sanguinary war. But the services of the animal were not confined to the soil of Italy. During the whole period in which Asdrubal had commanded the Carthaginians in Spain during the absence of his brother, the elephants of Africa were incessantly battling with the Roman legions. In the great fight with the two Scipios at Tortosa, Asdrubal was defeated, but he saved his elephants.* At Cordova, at Indibilis, at Munda, at Aurinx, large numbers of elephants were invariably left slain upon the fields of battle. length Asdrubal fled to the Pyrenees, passed into Gaul, and crossed the Alps with horse and foot, and fifteen elephants, whose numbers were increased on his arrival in Italy (B.C. 207). In a few months the brave but unfortunate Asdrubal fought the battle of the Metaurus. The Romans directed their masses of horse and foot against the dreaded elephants. Attacked on every side, they became furious, tread. ing down their own battalions, and scattering de. struction wherever they rushed in their ungovernable career. Asdrubal, with a knowledge which seems scarcely to belong to his time, had provided against thisdanger so generally consequent upon the employment of elephants. Their drivers were provided with a knife and mallet, having received in-Livy, lib. zzviri

structions to drive the knife between the junction of the head and spine of the animal should he become ungovernable. Six were thus slaughtered by the division of the spinal marrow. But neither the courage nor the skill of Asdrubal could stand up against the Roman legions. Distracted with the loss of his troops, he rushed into the midst of a battalion of the enemy, and died fighting single handed

against thousands.

The war was carried on by Hannibal in Italy with various success till Scipio invaded Africa. The fear of this invasion several years before had led the Carthaginians to make extraordinary exertions to repel their enemy; and Appian records that a number of elephants were taken in a yery short time, to be trained for war. The rapidity with which this chase was executed proves that the elephants had not to be sought for at a great distance from Carthage, and that they were then common in Barbary; whereas they are now only found towards the river Senegal. Mago, the brother of Hannibal. about the time that Scipio descended on Africa, invaded Italy from Carthage with new forces, and drew up an immense front of elephants before the Roman cavalry at the battle of Insubria. But the Roman arms were again victorious. Hannibal followed Scipio to Africa, and the two great generals met at Zama. In the front of Hannibal's line were eighty elephants, who carried destruction among the light-armed troops of Scipio; but the wary Roman ordered his cavalry to dismount, and directed all the power of his archers against the affrighted beasts. The invariable consequences of a panic among the elephants again ensued; Han-

nibal's right wing was broken by the confusion which his flying elephants produced. He retreated for refuge to Adrametum; and the second Punic war was at an end (B.C. 201). By the treaty of peace the Carthaginians engaged to deliver up their elephants of war, and never again to tame these animals for military service. Part of the elephants which Scipio had captured were sent to Rome to adorn his triumph. In his procession to the Carthaginian elephants, no longer dreaded; and Africa, the fruitful mother of elephants," was humbled in the dust.

For a period of eighty years, during which the Romans had encountered elephants of war, and had often captured them in large numbers, they had never once attempted to employ them in their own armies. They had, however, as we have repeatedly seen, expressly adapted their military tactics to the discomfiture of these animals, seeking most wisely to render them as injurious to their enemies as to themselves. The Roman soldiers were taught to wound the proboscis, that sensitive instrument whose powers we have so fully described; horses clothed in mail were yoked to chariots, in which sat cuirassiers who thrust at the elephants with pikes of enormous length; other soldiers, especially opposed to the elephants, had spikes on every part of their armour to prevent the animal from seizing them with his trunk; light horsemen thrust him with their spears as they rushed by at full speed; slingers, with stones fastened with cords to long poles, assaulted the governor of the elephant; and carrobalistes (instruments used to propel darts)

poured upon the devoted beast their "iron sleet." The legions, too, were taught to make way for the tharging elephant, and, when he was fairly in the centre of their ranks, to hem him round with numners, against which even his mighty force was of no avail. Such were the defensive means which the Romans employed to resist this assailant. who seems to have performed the same service of breaking dense masses of troops as the artillery of modern warfare. But the time at length arrived when Rome used them in her own armies. In the year after the power of Hannibal was broken at Zama, the first Macedonian war commenced; and in the very earliest action, the African elephant was fighting as an auxiliary of his old enemy, the Roman spearman. In the third year of that war, Titus Quintius Flaminius employed them with signal advantage against the troops of the King of Macedon, who could not stand up against this strange and formidable power. In the second Macedonian war, about thirty years afterward, Q. Martius Philippus used them against Perseus, the last King of Macedon. The unfortunate prince, whose great predecessor, by his conquest of India, had made Europe familiar with the power of the elephant, possessed none in his own army. His horses were terrified at the enormous animal, and he, therefore, in some degree imitating the example of Semiramis, caused wooden elephants to be constructed containing a man, who, with a kind of trumpet, imitated that-sound of rage which preceded the furious onslaught of the mighty quadruped. His devices and his courage were equally fruitless; after a war of four years, Macedonia became a Roman province.

In the period which intervened between the close of the first and beginning of the second Macedonian war, the Roman arms were turned against Antiochus, king of Syria. At the battle of Magnesia, the African elephant came into contest with the Indian, as had before been the case under the Ptolemies. The peaceful inhabitants of the marshy plains and pathless woods of two remote continents, separated from each other by seas and deserts, were brought together in hostile array by the restless passions of rival states. The African elephants of Scipio were found greatly inferior in height and strength to the Indian ones of Antiochus. They were placed, therefore, in his rear, as a reserve. But neither man nor elephant could stand against the force of the Roman sword. Fifty thou sand of the troops of Antiochus were killed or captured, and only fifteen elephants escaped alive on that day of slaughter. The Romans enforced the same condition of peace as they exacted of the Carthaginians. Antiochus engaged to deliver un his elephants, and to train no more for war.

Julius Casar had, occasionally, the elephant in his armies; but he appears to have attached very little importance to their use. They were probably encumbrances to the rapidity of his marches; and were retained only to give encouragement to his soldiers, where they were likely to be opposed by the same description of force, or to strike panic into those nations who were unused to this mode of making war. Thus, in a battle with Scipio in Africa, although he was opposed by thirty elephants pearing towers of archers, he left his own elephant force in the rear of his line, and discomfitted those

of Scipio with his archers and slingers.

Cæsar has left us an anecdote in his African Commentaries which strikingly exhibits the mode in which the elephant was accustomed to fight. A wounded elephant, furious with rage, attacked an unarmed follower of the troops, and, kneeling upon him, crushed the life out of his body. A veteran of the fifth legion rushed forward to attack the beast, who was roaring and lashing with his proboscis. The elephant immediately forsook his vic tim; and, catching up the soldier in his trunk, whirled him in the air. But the intrepid warrior did not lose his presence of mind; he wounded the elephant in his sensitive proboscis, till, exhausted with pain, he dropped the soldier, and fled in terror to his companions.

Antiquarian writers, who have examined the subiect with an attention somewhat disproportioned to
its real importance, appear to agree that, although
there are many medals existing representing Julius
Cesar and his immediate successors drawn in chariots by elephants, the Roman princes were not accustomed to grace their triumphs by this parade
until the time of Alexander Severus. In the triumph of Cæsar for his victories in Gaul, elephants
were used as bearers of forches to illuminate the
procession which took place at night. This was
in the last day of the triumph, when Cæsar went
home after supper crowned with flowers, and receiving the almost idolatrous incense of a shouting
multitude.*

"'Twas night; but now
A thousand torches, turning night to day,
Blazed, and the victor, springing from his seat

* Suctonius and Dion.

Ungitized by Google

Went up, and kneeling, as in fervent prayer. Entered the Capitol."

ROGERS's Italy.

In his African triumph, the spoils of war were exhibited upon chariots of ivory; and the whole apparatus of the pomp had reference to elephants. Pompey, upon his return from his victories in Africa, was drawn in a chariot by four elephants to the gates of Rome. But the pride of the conqueror was limited by natural obstacles. The triumphal arch was too narrow to admit the unaccustomed pomp; and the victor was obliged to descend, and resort to the humbler exhibitions with which Rome had been familiar.* The ridicule which must have been thrown upon Pompey on account of this remarkable failure (for a highly luxurious people never fail to cultivate that spirit which makes the satire of the great a very general pleasure), may have deterred the earlier emperors, prodigal as were the senate and the people of every ostentation that could pamper their bloated pride, from the repetition of such an unfortunate experiment. When, however, more than two centuries after Pompey, the Roman arms were directed against the Persians, the emperors became imitators of Oriental splendour in their triumphs; and the elephant-chariot was not unfrequently seen at Rome, bearing the conqueror, who was surrounded by all the magnificence which might command the popular adulation. It is unnecessary to trace these ceremonials with antiquarian minuteness, particularly as we have a description, from the eloquent pen of Gibbon, of the triumph of Aurelian (A.D.

* Plutarch ; " Pompey."

274) after his conquest of Palmyra, which may show the nature of these spectacles, so gratifying to the pride of Rome, and so humiliating to the vanquished nations whom she insulted in the haughty spirit which had so long rendered her supremacy odious: "The pomp was opened by twenty ele-phants, four royal tigers, and above two hundred of the most curious animals from every climate of the north, the east, and the south. They were followed by one thousand six hundred gladiators, devoted to the cruel amusement of the amphithea-The wealth of Asia, the arms and ensigns of so many conquered nations, and the magnificent plate and wardrobe of the Syrian queen, were disposed in exact symmetry or artful disorder. ambassadors of the most remote parts of the earth, of Æthiopia, Arabia, Persia, Bactriana, India, and China, all remarkable by their rich or singular dresses, displayed the fame and power of the Roman emperor, who exposed likewise to the public view the presents he had received, and particularly a great number of crowns of gold, the offerings of grateful cities. The victories of Aurelian were attested by the long train of captives who reluctant. ly attended his triumph; Gauls, Vandals, Sarmatians, Alemanni, Franks, Gottis, Syrians, and Egyptians. Each people was distinguished by its peculiar inscription, and the title of Amazons was bestowed on ten martial heroines of the Gothic na. tion who had been taken in arms. But every eye, disregarding the crowd of captives, was fixed on the Emperor Tetricus and the Queen of the East. The former, as well as his son, whom he had created Augustus, was dressed in Gallic trou-

EMPLOYMENT IN ANCIENT TRIUMPHS. 279

sers, a saffron tunic, and robe of purple. The beauteous figure of Zenobia was confined by fetters of gold; a slave supported the gold chain which encircled her neck, and she almost fainted under the intolerable weight of jewels. She preceded on foot the magnificent chariot in which she ence hoped to enter the gates of Rome. It was followed by two other chariots, still more sumptuous, of Odenathus and of the Persian monarch. The triumphal car of Aurelian (it had formerly been used by a Gothic king) was drawn, on this memorable occasion, either by four stags or by four elephants."*

After the subjection of the Carthaginians and of the Kings of Asia to the power of the republic, and after the civil contests of Cæsar and Pompey were at an end, elephants of battle appear to have almost entirely fallen into disuse in the Roman armies. During, however, a period of more than five centuries, the brutal sports of the Circus occasioned a greater destruction of the animal than the most pro-

fuse waste of the Roman wars.

In the next chapter we shall endeavour to present a general view of the Roman amphitheatre, in which elephants were largely employed for the gratification of the patricians as well as the plebeians of Rome.

* Decline and Fall, chap. xi.

CHAPTER XIL

THE ROMAN AMPRITHEATRE.

THE history of the Amphitheatre is intimately connected with the history of the moral habits and the political condition of the Roman people. When the elephants of Metellus were driven by slaves around the Circus, the exhibition appears to have been devised, not to gratify the cruel passions of the populace, but to destroy those terrors which were unworthy of the Roman name. But when five thousand wild beasts of all kinds were slaughtered at the dedication of the Colosseum of Vespasian, and eighty thousand spectators, looking down securely from their marble seats, shouted with a ferocious joy at the dying agonies of the mangled victims, the Roman courage was gone; the Roman liberty was trampled upon; public magnificence and private wretchedness went hand in hand; the purple senator and the ragged citizen were equally corrupted and degraded by a brutal despotism. Milton, who better, perhaps, than any man, had seen the indissoluble connexion between manners and government, has thus described the Romans under Tiberius:

"That people, victor once, now vile and base, Deservedly made vassal; who, once just, Frugal, and mild, and temp'rate, conquer'd well-But govern'd ill the nations under yoke, Peoling their provinces, exhausted all By lust and rapine; first ambitious grown Of triumph, that insulting varity; Then cruel, by their sports to blood inured Of fighting beasts, and men to beasts exposed; Luxurious by their wealth, and greedier still, And from the daily scene effeminate."

For four centuries this "daily scene" of despicable cruelty went forward, with a prodigality of expense that might have bestowed knowledge, and comfort, and independence upon the starving and ignorant populace, who crowded to these frightful sports. But it was the policy of their rulers to keep them poor and profligate, ignorant and ferocious, ragged and tumultuous; captivated by shows, and reckless of the solid enjoyment of which those very shows deprived them. At length "the tremendous sound of the Gothic trumpet" was heard at the gates of the imperial city. The golden porches and the ivory pillars of the Amphitheatre of Vespasian were given up to the rapine of the barbarians; the very clamps of iron and brass, that held together the conderous stones of that wonderful edifice, were removed by the plunderers; and succeeding generations went thither as to a quarry to find the materials of their temples and their palaces. Yet the "enormous skeleton" still stands, to show what prodigious works may be raised by the skill and perseverance of man, and how vain are the mightiest displays of his power when directed towards objects which are unsuited to advance his capacity for knowledge and for virtue.

Those exhibitions of the Circus which consisted of the combats of wild beasts with each other, originated in the desire of the rulers of Rome to flatter

* Paradise Regained, book iv.

the vanity of the people, by displaying to them the wonders of distant regions which had submitted to the arms of the republic. Pliny states that Mutius Scævola (B.C. 102) was the first who exhibited a combat of lions in the Circus. It is said that C. Scipio Nasica and C. Lentulus were the first who introduced combats between beasts and armed men; and that lions, bears, and other quadrupeds of prey were let loose in the arena, to fight with slaves and convicts.* Lucian states that the same brutal practice was pursued at Athens in the time of Solon. When Sylla found it necessary to purchase the suffrage of the people by arts, which were more powerful with the vain multitude than the fame of his great exploits, he availed himself of that love of brutal sports which had become a confirmed passion with the Romans. He procured a hundred lions from Mauritania, as well as men who were accustomed to fight them; and thus the desire to see human blood flow became a new excitement, till at length,

"The buzz of eager nations ran In murmur'd pity, or loud-rear'd applause, As man was slaughter'd by his fellow man."†

It was the policy of the growing factions of Pompey and Cæsar to vie with each other in the magnificence of the exhibitions of the Circus. Pompey, at the dedication of his theatre, exhibited an almost incredible number of lious (five hundred, according to some authorities), and eighteen elephants, fighting with each other and with armed men. It would appear from a passage in Seneca, in which the philosopher speaks with indignant reprehension

^{*} Livy, lib. xliv. † Childe Harold, canto iv.

of such cruel sports, that Pompey was the first who introduced men into the arena as combatants with elephants. Previous to the exhibition of elephants by Pompey, they had fought in the Circus with each other, and with bulls. In the second consulate of Pompey (B.C. 54), a number of elephants were opposed in the Circus to Getulian archers: and this exhibition, according to Pliny, seems to have been distinguished by several remarkable circumstances. One of the elephants, although furious from a wound, is recorded to have seized upon the shields of his adversaries, and to have thrown them into the air with a peculiar movement. doubtless the effect of training, which caused the shields to whirl round before their fall to the earth. On this occasion too, an elephant having been killed by a single blow of a javelin through his eye, his fellows rushed forward in a general charge to save him, and, coming with great force against the iron railings of the Circus, broke them down and injured several of the spectators. The elephants, however, were soon completely at the mercy of their practised assailants; and the historian Dion adds a description of a wonder no less honourable to the Roman people than to the sagacity of the elephants. The spectators, he says, so compassionated the animals when they saw them raising their trunks up to heaven, roaring most piteously, as if imploring the gods to avenge the cruel treachery which had compelled them to come from their native forests, that they demanded that they should be saved, Pliny, relating the same story, states that the populace were so touched by the terror which the elephants exhibited, and so full of admiration at their

sagacity, that, regardless of the presence of Pompey, and forgetful of his munificence, they rose from their seats and demanded, with imprecations against the consul, that the combat should he at an end. But habit appears soon to have reconciled the people to the torturing cruelties of the amphitheatre,

"Where murder breathed her bloody steam."

We have no other recorded instance of their clemency towards beasts; and too often, when the exhausted gladiator tottered towards the edge of the arena to supplicate his life from the spectators, the remorseless rabble turned down their thumbs as the signal for the final butchery, and the "genial laws" of the Circus were upheld at no less cost than the universal debasement of a mighty nation.

In the games of Pompey a rhinoceros was exhibited for the first time; and this quadruped subsequently became a favourite excitement to the

passions of the Circus.

The games given by Cæsar, during his dictatorship, were rendered attractive to the people, as those of Pompey had been, by the combats of elephants. "When Cæsar, the conqueror of the world," says Velleius Paterculus, "returned to the city, he forgave all who had borne arms against him (which passes all human belief), and exhibited shipfights, and contests of horse and foot, together with elephants." In these sports of the Great Dictator, twenty elephants were opposed to five hundred men on foot. Among the other spoils which the conquered deserts of Africa had afforded him, Cæsar exhibited the camelopard.

The immense supplies of untamed animals which the confirmed love of the sports of the Circus de-

manded, could not be obtained without a prodigal expenditure and constant anxiety on the part of the government of Rome. The people, never satiated with such exhibitions, demanded them as the price of their obedience to the respective factions who courted or compelled their homage. the ædile, writing to Cicero, then proconsul of Cilicia, expressly charges him to procure, at any risk or cost, a number of panthers for the next games; to which mandate Cicero replies, that all possible exertions had been made by the hunters, but that these animals were unusually scarce, and that he had been obliged to send into Caria to procure We thus see that it was a part, and a very considerable one, of the Roman machinery of state, to keep the popular appetite for slaughter incessantly supplied. Brutus, after the assassination of Cæsar, during his absence from Rome, ordered the games to be conducted with the splendour to which the people had been accustomed; and he was compelled to abstract a considerable sum from his slender means of carrying on the war of liberty, to purchase "a great number of strange beasts, of the which he would not give one of them to any friend he had, but that they should all be employed in his games." Augustus, having the riches of the world at his command, crowded the Circus at the solemnization of the games with wild beasts from every country. The conquest of Egypt offered new stimulants to the popular curiosity. Snakes of enormous magnitude were exhibited in the Comitium, and at one time thirty-six crocodiles were

Cicero, Fam. Epis., lib. ii., ep. 11. † Plutarch; "Brutas." North's translation.

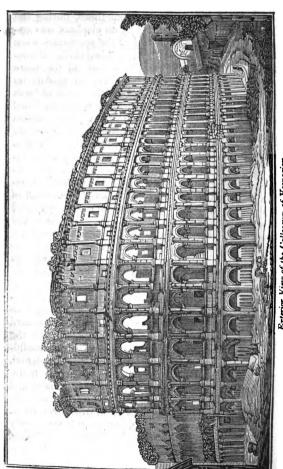
killed in the Flaminian Circus. Claudian, who, four centuries after, described the waste of animal life during the long period when the Roman power tore every beast from its native desert, has painted the terrors which the seamen of Rome felt as they passed over the waters with their strange cargo:

"The fainting slave let fall his trembling oar,
And the pale master fear'd the freight he bore."

When the imperial power was firmly established, and the Cæsars were at liberty to indulge their private lusts with a profuseness of expenditure which surpasses the calculations of all modern luxury, and to display their public magnificence with a prodigality which leaves the feeble despots of later days immeasurably behind them in the splen-dour of their wickedness, the sports of the am-phitheatre were conducted upon a scale to which the consuls of the republic had scarcely dared to aspire. Caligula, on his birthday, gave four hundred bears, and as many other wild beasts, to be slain; and on the birthday of Drusilla he exhibited these brutal spectacles, continued to the succeeding day on a similar scale. Claudius instituted combats between Thessalian horsemen and wild bulls; and he also caused camels to fight for the first time with horses. Invention was racked to devise new combinations of cruelty. Many of the emperors abandoned themselves to these sports with as passionate an ardour as the uncultivated multitude. Sensuality debases as much as ignorance, because it is ignorance under another name Claudius rose at daylight to rapair to the Circus, and frequently remained, that he might not lose a single pang of the victims, while the people went

to their afternoon meal. Sometimes, during the reigns of Claudius and Nero, an elephant was opposed to a single fencer; and the spectators were delighted by the display of individual skill. times, hundreds and even thousands of the more ferocious beasts were slaughtered by guards on horseback; and the pleasure of the multitude was in proportion to the lavishness with which the blood of man and beast was made to flow. The passion for these sports required a more convenient theatre for its gratification than the old Circus. The Co. losseum was commenced by Vespasian, and completed by Titus (A.D. 79). This enormous building occupied only three years in its erection. Cassiodorus affirms that this magnificent monument of folly cost as much as would have been required for the building of a capital city. We have the means of distinctly ascertaining its dimensions and its accommodations from the great mass of wall that still remains entire; and we may not improperly bestow a few pages upon its description. Such a building can never again appear in the world, because mankind have learned that the expenditure of princes upon useless monuments to pride and power, can only be wrung from the hard labour of the people themselves; and that the wealth thus diverted from the channels of usefulness perpetuates the abuses of misgovernment, and, at the same time, impedes the progress of the many in knowledge and comfort. Public happiness and the ostentation of despotism cannot exist together.

The Colosseum, which is of an oval form, occupies the space of nearly six acres. "It may justly be said to have been the most imposing building, from its apparent magnitude, in the world; the



sterior View of the Colloseum of Vespanan.

Pyramids of Egypt can only be compared with it in the extent of the plan, as they cover nearly the same surface."* The greatest length, or major axis, is 620 feet; the greatest breadth, or minor axis, The outer wall is 157 feet high in its whole extent. The exterior wall is divided into four stories, each ornamented with one of the orders of architecture. The cornice of the upper story is perforated for the purpose of inserting wooden masts, which passed also through the architrave and frieze, and descended to a row of corbels immediately below the upper range of windows, on which are holes to receive the masts. These masts were for the purpose of attaching cords to, for sustaining the awning which defended the spectators from the sun or rain. Two corridors ran all round the building, leading to staircases which ascended to the several stories; and the seats which descended towards the arena, supported throughout upon eighty arches, occupied so much of the space that the clear opening of the present inner wall next the arena is only 287 feet by 180 feet. Immediately above and around the arena was the podium, elevated about twelve or fifteen feet, on which were seated the emperor, senators, ambassadors of foreign nations, and other distinguished personages in that city of distinctions. From the podium to the top of the second story were seats of marble for the equestrian order; above the second story the seats appear to have

^{*} The Architectural Antiquities of Rome, by E. Cresy and G. L. Taylor; a work of equal accuracy and splendour, to which we are indebted for the subsequent details of the arrangements of the building.

B. R.

been constructed of wood. In these various seats eighty thousand spectators might be arranged according to their respective ranks; and, indeed, it appears from inscriptions, as well as from expressions in Roman writers, that many of the places in this immense theatre were assigned to particular individuals, and that each might find his seat without confusion. The ground was excavated over the surface of the arena in 1813; a great number of substructions were then discovered, which by some antiquaries are considered to be of modern date, and by others to have formed dens for the various beasts that were exhibited. The descriptions which have been left by historians and other writers of the variety and extent of the shows, would indicate that a vast space and ample conveniences were required beneath the stage, to accomplish the wonders which were, doubtless, there realized in the presence of assembled Rome.

It would be unnecessary to attempt a description of the splendours of the Colosseum, and the scenes which it exhibited from the time of Titus to that of Honorius, while two celebrated pictures of these marvels exist, from authors of very different characters of excellence. Gibbon, in his twelfth chapter, has imbodied, with his usual power of expression, those passages of Calpurnius and of other ancient writers, which represent this extraordinary building and the pomp which its walls disclosed; but he acknowledges his obligations to Montaigne, who, says the historian, "gives a very just and lively view of Roman magnificence in these spectacles." Our readers will, we doubt not, be gratified by the quaint but most appropriate sketch of the old philosopher of France:

"It was doubtless a fine thing to bring and plant within the theatre a great number of vast trees. with all their branches in their full verdure, representing a great shady forest, disposed in excellent order, and the first day to throw into it a thousand ostriches, a thousand stags, a thousand boars, and a thousand fallow-deer, to be killed and disposed of by the people; the next day, to cause a hundred great lions, a hundred leopards, and three hundred bears, to be killed in his presence; and for the third day, to make three hundred pairs of fencers to fight it out to the last, as the Emperor Probus did. was also very fine to see those vast amphitheatres. all faced with marble without, curiously wrought with figures and statues, and the inside sparkling with rare decorations and enrichments:

> 'Behold a belt with jewels glorious made, And a brave portico with gold o'erlaid;'

all the sides of this vast space filled and environed from the bottom to the top, with three or fourscore ranks of seats, all of marble also, and covered with cushions, where a hundred thousand men might sit, placed at their ease; and the place below, where the plays were played, to make it by art first open and cleft into chinks, representing caves that vomited out the beasts designed for the spectacle; and then, secondly, to be overflowed with a profound sea, full of sea monsters, and loaded with ships of war, to represent a naval battle; and, thirdly, to make it dry and even again for the combats of the gladiators; and, for the fourth scene, to have it strewed with vermilion and storax instead of sand. there to make a solemn feast for all that infinite number of people; the last act of only one day.

"Sometimes they have made a high mountain

advance itself, full of fruit-trees and other flourish. ing sorts of woods, sending down rivulets of water from the top, as from the mouth of a fountain; other whiles, a great ship was seen to come rolling in, which opened and divided of itself; and, after having disgorged from the held four or five hundred beasts for fight, closed again, and vanished without help. At other times, from the floor of this place they made spouts of perfumed waters dart their streams upward, and so high as to besprinkle all that infinite multitude. To defend themselves from the injuries of the weather, they had that vast place one while covered over with purple curtains of needlework, and by-and-by with silk of another colour, which they could draw off or on in a moment, as they had a mind. The network also, that was set before the people to defend them from the violence of these turned-out beasts. was also woven of gold.

"If there be anything excusable in such excesses as these," continues Montaigne, "it is where the novelty and invention create more wonder than expense." Fortunately for the real enjoyments of mankind, even under the sway of a Roman despot, "the novelty and invention" had very narrow limits when applied to matters so utterly unworthy and unintellectual as the cruel sports of the amphitheatre. Probus, indeed, transplanted trees to the arena, so that it had the appearance of a verdant grove; and Severus introduced four hundred ferocious animals in one ship sailing in the little lake which the arena formed. This was a rare exercise of invention: and it was commemorated accordingly in a medal, whose inscription bore that

the pageant of Severus was the "joy of the times." But on ordinary occasions, profusion—tasteless, naughty, and uninventive profusion-the gorgeousness of brute power, the pomp of satiated luxurythese constituted the only claim to the popular admiration. If Titus exhibited five thousand wild beasts at the dedication of the amphitheatre, Traian bestowed ten thousand on the people at the conclusion of the Dacian war. If the younger Gordian collected together bears, elks, zebras, ostriches, boars, and wild horses, he was an imitator only of the spectacles of Carinus, in which the rarity of the animals was as much considered as their fierce. Gibbon has well remarked," While the populace gazed in stupid wonder on the splendid show, the naturalist might indeed observe the figure and properties of so many different species, transported from every part of the ancient world into the am. phitheatre of Rome. But this accidental benefit. which science might derive from folly, is surely insufficient to justify such a wanton abuse of the public riches." The prodigal waste of the public riches, however, was not the weightiest evil of the sports of the Circus. The public morality was sacrificed upon the same shrine as its wealth. destruction of beasts became a fit preparation for the destruction of men. A small number of those unhappy persons who engaged in fight with the wild animals of the arena, were trained to these dangerous exercises, as are the matadors of Spain at the present day. These men were accustomed to exhaust the courage of the beast by false attacks: to spring on a sudden past him, striking him behind before he could recover his guard; to cast a cloak over his eyes, and then despatch or bind him at this critical moment of his terror; or to throw a cup full of some chymical preparation into his gaping mouth, so as to produce the stupefaction of intense agony. But the greater part of the human beings who were exposed to these combats, perilous even to the most skilful, were disobedient slaves and convicted malefactors. The Christians, during their persecutions, constituted a very large number of the latter class. The Roman power was necessarily intolerant; the assemblies of the new religion became objects of dislike and suspicion; the patience and constancy of the victims increased the fury of their oppressors; and even such a man as the younger Pliny held that their obstinacy alone was deserving of punishment. Thus, then, the imperial edicts against the early Christians furnished more stimulating exhibitions to the popular appetite for blood, than the combat of lion with lion, or gladiator with gladiator. The people were taught to believe that they were assisting at a solemn act of justice; and they came, therefore, to behold the tiger and the leopard tear the quivering limb of the aged and the young, of the strong and the fee-ble, without a desire to rescue the helpless or to succour the brave.

"The emperors," says Montaigne, "excused the superfluity of their plays and public spectacles, by reason that their authority did, in some sort (at least in outward appearance), depend upon the will of the people of Rome; who, time out of mind, had been accustomed to be entertained and caressed with such shows and excesses." There is no difficulty in perceiving, that if the Roman gove.

ernment had been conducted upon a just and reasonable principle of regard for the rights of allthat is, if it had been a free government—such excesses could never have been committed. The government of Rome knew well, that in the provinces the sports of the amphitheatre were intended to reconcile the people to the oppression of their gov-"The emperor," says Tacitus, "issued an edict, that no procurator, or any other magistrate. who had obtained a charge in any province, should exhibit a spectacle of gladiators or wild beasts, nor of any other popular entertainment whatsoever; for, before this, they had, by such acts of munificence. no less afflicted those under their jurisdiction than by plundering them of their money; while, under the influence of such court to the multitude. they sheltered their arbitrary delinquencies and rapine." But what was checked abroad upon a small scale was thought necessary at home upon a large one; and apologists were not wanting to justify the abuse. Some of the ancient defenders of the cruelties of the arena have held that they were necessary to keep up that courageous spirit which had made Rome the mistress of the world. But the truth is, that they were expressly adapted to deaden and destroy that spirit by which the real courage of a nation is best displayed, the spirit of resistance to oppression. It was easy for the sophists of Rome to write, that the combats of elephants and bulls, of tigers and bears, maintained that popular temper that kept the Goth far away from the city gates. But had the institutions of Rome been such as to raise up the plebeian class into importance and respectability, by a more equal dis-

tribution of the national wealth, the Goth would never have dared to bring the weakness of barbarism into hostile contact with the strength of civilization. It is the common belief that Rome fell through her luxury. But if we regard the number of the luxurious, we may come to perceive that the few only were directly corrupted by the possession of too much wealth, while the many were weakened by the destitution of those means which constitute a happy, and, therefore, a strong population. Between the brutal sensualities of the patricians of Rome, and the miserable degradation of her domestic slaves, there was no large class of productive citizens, acquiring independence by their labour, and feeling that the sources of their enjoyments, and the securities for their continuance, were not to be bestowed or to be cut off at the will of emperors and senators. But there was a populace, idle and dissipated, turbulent and slavish, proud and abject, vain as Romans, creeping as men. While the privileged orders poured the spoils of the world into their coffers, and wrung from industry a much larger share of the fruits of the earth than the possession of the soil would justly entitle them to command, they could afford to bestow upon the hungry plebeians donatives of bread and wine; to flatter their vanity by the costly exhibitions of the amphitheatre; to build marble baths, into which perpetual streams of tepid water flowed from silver fountains. "where the meanest Roman could purchase, with a small copper coin, the daily enjoyment of a scene of pomp and luxury which might excite the envy of the kings of Asia."* But this was not public happiness. In the crowded dwellings of the city, the

* Gibbon, chap. xxii.

wives and children of the plebeians were suffering every privation, amid which human nature loses the last prop of virtue, self-respect. They were scantily fed; and very wretched must have been the private lot of the plebeian population, huddled together in garrets, whose gloom and filth were only solaced by the consideration, that the ragged father of the family might see an elephant and a bull engaged together in mortal combat, protected from the sun by the same awning that shaded an emperor; or select one of the three thousand seats of the baths of Diocletian, with the happy consciousness that the perfumed skin of the senator was washed from the same aqueduct that poured its freshness upon his own emaciated body.

It would be easy to point out how the government of Rome might have effected the real advancement of the people in knowledge and public spirit, at a tenth of the expense that supported the degrading amusements of the Circus. For instance, the beasts that were killed there in one hour might. have been wisely maintained in public gardens, filled with the choice plants that foreign conquests could have brought home, and thus a love of science might have been generated instead of a ferocious But it was not the policy of the Roman government to cultivate the real knowledge of the people. Had that cultivation been pursued, freedom must have followed. The ostentatious pageants which filled the citizen with wonder at the magnificence of Rome, and with contempt for the people of all other countries, made him a slave and kept him so. The value of this principle for the perpetuation of tyranny has not been unperceived

by the despots of modern days. Louis XIV. kept the French poor and abject by the fountains of Versailles; and Napoleon taught the same people to rejoice in the possession of works of art; to exult in the statues which he had stolen, and the arches which he had built, till they forgot that they pos-

sessed no representative government.

We have been led to these observations from the belief that, in contemplating the manners of antiquity and of foreign nations, the principal end ought to be the improvement of our own institutions. The Romans endeavoured to give to the ancient Britons, whom they had conquered, a love of the sports of the amphitheatre; and remains of considerable buildings, evidently dedicated to these amusements, exist in various parts of Great Britain, such as at Dorchester, at Silchester, at Caerleon, at Redruth. We have a distinct record also. that the games of the Circus were celebrated at York, in the time of Severus. These sports, the characteristics of a low state of morals and of knowledge, have long been abandoned, never, we trust, to be revived; though we still possess the bulldog, a chief favourite of the ancient Circus. But we may not improperly borrow a little of the Romish desire to afford the people amusement; and, by rendering it conducive to their advancement in taste and science, call forth new principles of attachment to institutions, whose abuses only have anything to apprehend from the widest spread of sound education.

WE have thus traced the history of the Elephant, as he is seen in modern menageries; as he is found

in India and Africa in a state of nature: as he is subjected by art to the dominion of man in the one country, or hunted to the death in the other; as he is trained in the East for domestic use, for exhibitions of cruelty, or for purposes of pageantry; or as he is still used in the wars of modern Asia. exhibited him, too, as he was formerly found in the tremendous conflicts of the Mongol conquerors; as he was employed in warfare by Alexander and his successors, by the kings of Egypt and Syria, and by the Romans and Carthaginians. Finally, we have shown him, also, administering to the brutal sports of ancient luxury. It is not the least singular part of this history, spreading over so large a period of human action, and connected with a time antecedent to man's existence, or, at least, his existence surrounded with the power of society, that the quadruped which appears thus to have been the first altogether in might of the fossil races, and which still preserves this supremacy in a state of nature, should, of all animals, be most exposed to the destructive strength of social man. As civilization advances, we find the physical force of the elephant less and less in request. In war he has been superseded by cannon; in commerce, by steam-engines. As long as ivory is desired in the arts, he will be encouraged to a certain extent in the uncultivated parts of Asia and Africa. is probable that, in a long future career of civilization, during which man may subject the whole world to the dominion of reason, the cost of maintaining the elephant in woods and pastures may be balanced against his comparatively small benefit to society; and then (and it is not difficult to imagine such a period of complete civilization) the race will altogether perish, and the elephant will be known to distant generations only as the mastodon and the megatherium are recognised—by a few skeletons, put together by science, out of bones scattered up and down the earth.

The scientific character of the elephant is as follows:

ELEPHANT.—Ελεφας, Aristotle—ELEPHAS, Pliny.
No cutting teeth; two large tusks in the upper jaw ²/₆. Molar ²/₆. Total 10.

The most striking characteristic of the genus, a long proboscis.

Feet round, terminated by small hoofs.

1. THE INDIAN ELEPHANT. Elephas Indicus, Cuvier.

Head elongated, forehead concave, ears small and angular; the laminæ of the molar teeth forming undulating parallel lines. Four hoofs on the hind feet.

Inhabits the South of Asia, particularly Ceylon.
2. THE AFRICAN ELEPHANT. Elephas Africa-

nus. Cuvier.

Head rounded, forehead concave, large rounded ears; the laminæ of the molar teeth forming rhomboidal lines. Three hoofs on the hind feet.

Inhabits the middle and south of Africa.

THE END.

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